

ADOBE CREATIVE SUITE P.14

We preview the world's greatest graphics apps.



15" POWERBOOK ON TRIAL P.56

Our mobile pros take the sleek new PowerBook G4 out for a test drive.

88

DEC  
2003

# MacAddict

A BETTER MACHINE A BETTER MAGAZINE

ULTIMATE HOLIDAY

## GIFT GUIDE

WE PICK THE **96 BEST**  
GIFTS FOR YOUR MAC  
AND PC FRIENDS



**16 Digital Cameras**



**45 Sexy New Gadgets**



**5 Fast DVD Burners**



**30 Gifts Under \$30**

**TORTURE TESTED!**

## DUAL 2GHZ POWER MAC G5

We cram it with RAM until  
it screams like a banshee!



### HOW TO:

- ▶ Rip MP3s from DVDs
- ▶ Transform Your Photos
  - Turn Day into Night
  - Clear a Foggy Day

### REVIEWED

After Effects 6.0 • Pro Tools LE 6.1.1  
Digi 002 audio mixer • DVD Studio Pro 2  
Tony Hawk's Pro Skater 4 • Fire800 drive  
iView MediaPro 2 • Photosmart 7960 printer  
Retrospect Desktop Backup 5.1 • and more...



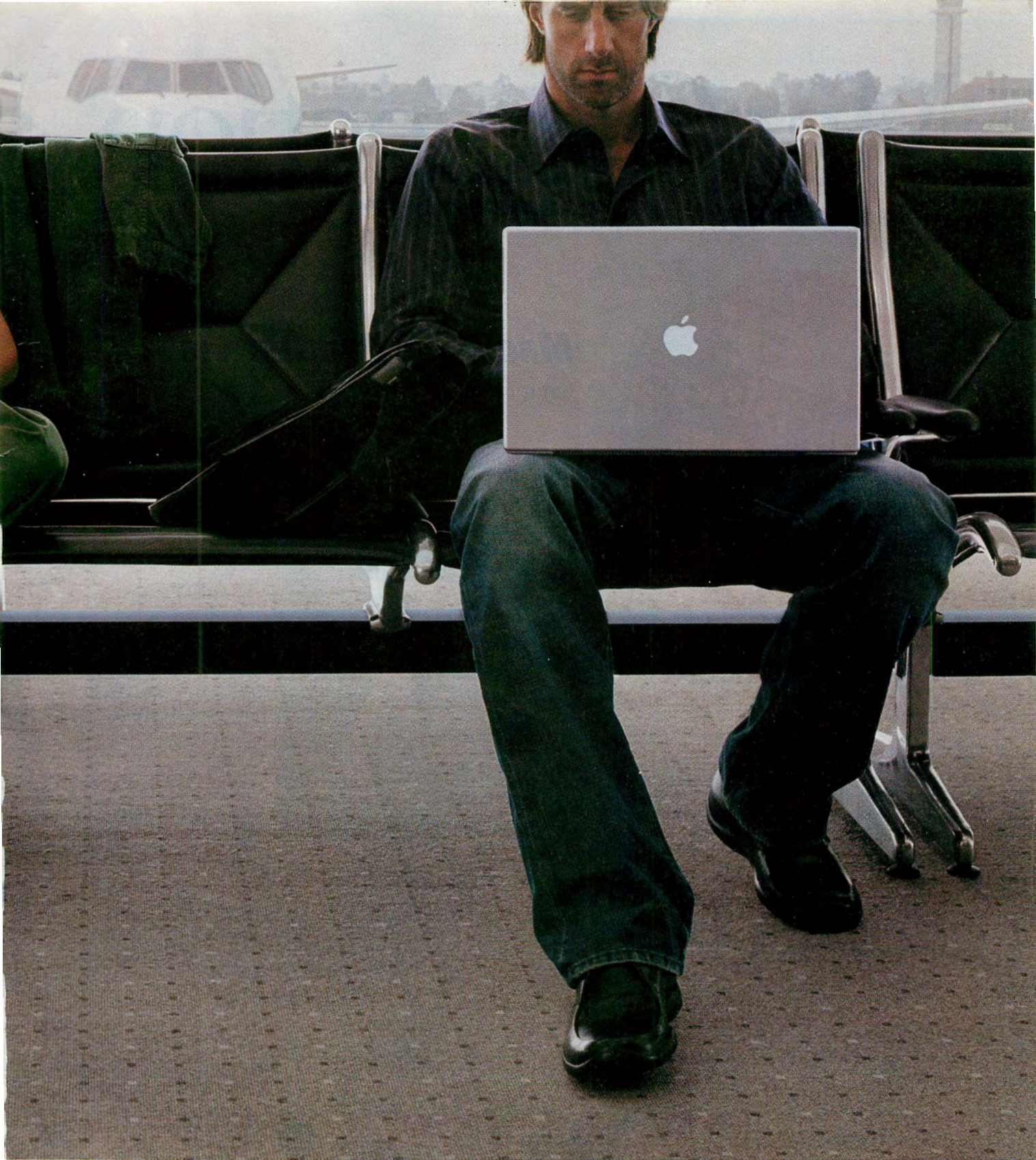




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# MacAddict

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Outshoots Jesse James.

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#### 41 The Great DVD Debate

Good-looking DVDs are no longer the exclusive domain of SuperDrive owners. We review four alternatives for authoring and burning DVDs and tell you how they stack up against iDVD. **by Helmut Kobler**

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What can \$30 buy? Quite a lot of good stuff, actually. **by Narasu Rebbapragada**

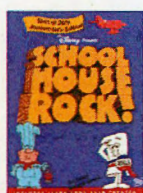


Airport security officials took the surprise out of Timmy's Christmas.

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If the editors of *MacAddict* went shopping, this is what we'd buy.

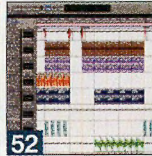
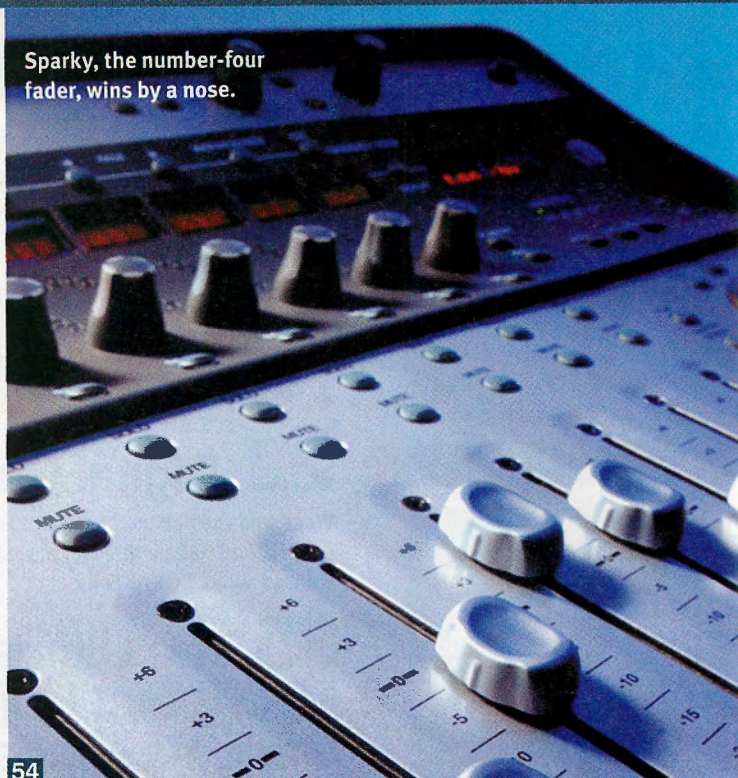
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**94 Letters**  
G5s are dust-proof. G4s are not old.  
Plus, how to turn off Safari's Debug menu.

**95 Contest**  
Win three fine mice by Logitech.

**96 Shut Down**  
The secret behind the Power Mac G5's raw power is furrier and consumes more sunflower seeds than you think.

Sparky, the number-four fader, wins by a nose.



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## QUICK TIPS FROM THIS MONTH'S ISSUE

### ➔ GET MORE RAM, MA'AM

Multiprocessor Macs are awesome, but if you're on a budget and not a professional video editor, you can probably make do with a single-processor model. An extra gig or two of RAM will make a single-processor faster than a stock Dual G5 in many functions.

**From Reviews, p50.**

### ➔ SKATE TOUGH OR DIE!

After you eat it in Tony Hawk's Pro Skater 4, quickly tap the Ollie key on you gamepad or keyboard a few times to make your skater get up immediately and resume skating, thereby wasting less of your two-minute run time. And no, this tactic still won't make elevators arrive any faster in the real world. **From Reviews, p64.**



### ➔ BURN MORE

Most DVD burners can produce discs that fit about one hour of top-quality video or audio on your DVDs. But if you need more space, most authoring apps let you encode media at a lower quality. **From "The Great DVD Debate," p41.**



### ➔ SAVE MONEY

You don't have to spend a lot of money on gifts to impress. Kids will love the SpongeBob Squarepants KidzMouse—and it's only \$25! **From "Stocking Stuffers," p46.**





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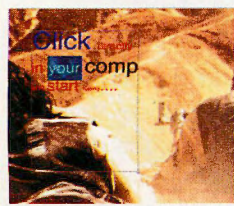


# the disc

Flex your creative mental muscles with such pro-level heavyweights as After Effects 6.0 and Cinema 4D CE 6, then kick back and relax with Burning Monkey Mahjong Solitaire, Tony Hawk's Pro Skater 4, Enigma, and other games, utilities, and helpful apps.

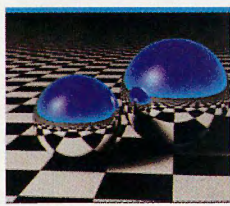
## After Effects 6.0 trial

This pro video app is the king of animated titles and special effects. Take this trial version for a spin, and you'll understand why.



## Cinema 4D CE 6

This package is chock-full of goodies you need to create your own 3D animated movies, including examples and a tutorial.



## Frosted Screen Saver 1.2.1

You can simply enjoy snowy screensaver scenery, or (for a five-buck upgrade fee) get into a snowball fight with a wise-ass snowman.



## ontheDisc

### AUDIO & MUSIC

DJ-1800 Classic 1.2  
DJ-1800 X 1.2  
iPitch 1.1  
WireTap 1.0

### DEVELOPMENT

iPatch 1.5  
REALbasic 5.2.1 demo  
uControl Source 1.3.2

### FUN & GAMES

Burning Monkey  
Mahjong Solitaire 1.0.1  
Crazy Golf 1.025  
Doubler Gold 1.01  
eMode 1.4.1  
Enigma 1.3.1  
Tony Hawk's Pro Skater 4 demo

### GRAPHICS & MULTIMEDIA

Absird 1.1  
After Effects 6.0 trial  
Cinema 4D CE 6  
Creative Pack 1.0.2  
EasyBatchPhoto 1.3  
GraphicConverter 4.8.2  
GraphicConverter X 4.8.2  
iView MediaPro 2 trial  
Storyboard Lite 1.1 demo

### INTERFACE

Frosted Screen Saver 1.2.1  
Marine Aquarium (OS 9) 2.0 demo  
Marine Aquarium (OS X) 2.0 demo  
MyControls 1.0b27  
NightLights Screensaver 1.1.4

### INTERNET & COMMUNICATION

eMail Verifier (OS 9) 1.2.1  
eMail Verifier X 1.2.1  
PithHelmet 0.7a  
SpamSieve 2.0.1

### PRODUCTIVITY

Nisus Thesaurus 1.0.1  
OnSync 1.1  
Phonebook 3.7.4 demo

### UTILITIES

BuddyPop 1.0.2  
Data Recycler X 1.2 demo  
DiskTracker (Classic) 2.3  
DiskTracker (OS X) 2.3  
Dragon Burn 3 trial  
iView Catalog Reader 1.0  
uControl 1.3.2  
Uptowner 1.0  
Uptowner (Jaguar) 1.3

### SPONSORS

DriveSavers: Lost Data  
video promo  
Prosoft Engineering:  
Data Recycler X 1.2 demo

## Staff Video: The Power Inside

On page 96, we show you the secret behind the Power Mac G5's awesome performance. Hint: She's cute, cuddly, scares big guys in purple shirts, and stars in this month's staff video.



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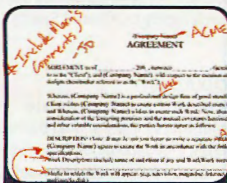
it's pressure sensitive so you can control the amount of a software tool's effect just by varying how firmly you press the pen tip to the tablet. Using the pen and mouse alternately reduces repetitive motion and gives you more control, comfort, and productivity.



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# Send Spam, Lose a Million Bucks



Masochist that I am, I start each day by reading the morning newspaper. War, disasters, Ben 'n' J.Lo's relationship turmoil. Rarely is there front-page news that puts a song in my heart and a spring in my step—but recently there was. *The San Francisco Chronicle* reported that California's former governor, Gray Davis, signed into law a bill that provides penalties of up to \$1 million to be levied on senders of unsolicited commercial email, better known to everyone outside of the Hormel Foods Corporation as *spam*.

This is fabulous news. The government is finally taking action against the deluge of cybercrap that slimes its way into my Entourage in-box hourly.

The new California law, which will take effect on January 1, 2004, allows consumers, ISPs, and the state attorney general to launch civil actions against not only senders of spam—who might be third-party hired guns used by unscrupulous advertisers—but also the advertisers themselves. It outlaws spam sent both to and from anyone in California, or through any server located in the state. Even better, it outlaws the nefarious practices of spidering, Web-crawling, or otherwise gathering email addresses from the Web to build spam-target databases.

And the law has teeth. Million-dollar teeth. Wronged parties can bring civil suits against spammers for damages of \$1,000 per message and \$1 million per spam-storm. Spammers would have to sell one hell of a lot of generic Viagra, fake university diplomas, and manhood maximizers to pay such penalties.

As might be expected, the spammeister community is up in arms, calling the new law an invitation to frivolous lawsuits and a sop to money-grubbing trial lawyers. My answer to their objections is short and to the point: "Blpfh!"

But maybe that's too harsh. Maybe I should be more thoughtful, more reasonable. So here's a more rational reply: "Dear slimeballs: You are currently responsible for up to 30 percent of all Internet traffic, and your unsolicited sales pitches are projected to reach 50 percent by the end of this year. You're clogging our servers, congesting the Internet's data pipelines, body-slammng business productivity, and pouring ludicrous filth and blatant flimflam onto the screens of millions of unwilling victims. Please stop."

Or we'll sue your sorry asses.

Enjoy, *R.k*

## coming soon: january 2004

Our editors fill you in on what they're preparing for the next issue of *MacAddict*.

**FEATURES:** Happy 20th, Mac! It's the 20th anniversary of the first Macintosh, and we've got a fantastic celebration in store. Relive the best and worst moments of the last 20 years. Plus, what happens when you pit a G5 against top Windows machines? We're about to find out, and we'll let you know. Plus, the scoop on Panther.—*Cathy*

**HOW TO:** Apps & Widgets MacAddict.com Forum dwellers, busybodies, and music lovers will be in for a treat—we show you how to create cool apps and widgets that let you view online opinion posts, manage all your activities, and turn your Mac's keyboard into a music keyboard.—*Kris*

**REVIEWS:** Humongous Hardware We'll sidestep those pesky intellectual-property laws by sharing our DVDs and CDs perfectly legally—that is, via the 200-disc PowerFile R200 MFX networkable carousel. We'll also try out Canon's wee Elura 50 DV cam, the Pyro A/V Link analog-to-DV video converter, and a whole lot more.—*Niko*

**NEWS:** The Latest from Apple We're dishin' the dirt on Apple's latest developments and the app that turns your camcorder into a tape backup system. We unearth little known facts about the Power Mac G5 supercomputer that Virginia Tech is building. Plus, as usual, the coolest gadgets on earth.—*Narasu*

## STAFF RANTS

**Q:** What do you think would be an appropriate punishment for spammers?



**Kris Fong** HORMEL HASHER

What do you think would be an appropriate punishment for spammers? Their home, cell, and work phone numbers should be given to every telemarketer, and their home address sent to every Jehovah's Witness recruiter on the planet.



**Max** SPAMMER SLAMMER

What do you think would be an appropriate punishment for spammers? They should be forced to write personal apologies to each of their victims, using LotusWrite 2.0 on an 80386SX-16 Packard Bell Legend running Windows 3.0.



**Peter Marshutz** CLOSET MATHEMATICIAN

What do you think would be an appropriate punishment for spammers? One million dollars seems unrealistic—most of those clowns can't count that high. They should just have to read one million spam messages.



**Jenifer Morgan** MEMBER, DISPLEASED EMAILERS LOBBYING TO ERADICATE TRASHABLE EMAIL (D.E.L.E.T.E.)

What do you think would be an appropriate punishment for spammers? Since spamming is a reckless misuse of a privilege, the privilege of using computers should be taken away—one day for every spam sent.



**Narasu Rebbapragada** ECHAIN-GANG ADVOCATE

What do you think would be an appropriate punishment for spammers? Spam offenders should have to do three months roadside community service in yellow jumpsuits (to differentiate from the orange ones) that say, "I sent spam" in huge letters on the back. That way people in cars could throw things at them.



**Brendan McKenna** THE PATRIOT ACTOR

What do you think would be an appropriate punishment for spammers? Six months in Guantanamo without due process, and force-fed a steady diet of my late grandmother's highly processed Spam Surprise casserole.



**Cathy Lu** SPAMTABULOUS

What do you think would be an appropriate punishment for spammers? They should be made to write on a chalkboard a thousand times over: "You cannot increase your penis size by 5 inches in one week."



**Niko Coucouvanis** LUNCH-MEAT GOURMAND

What do you think would be an appropriate punishment for spammers? I say leave 'em alone! I love the stuff those guys at Hormel make—cut it up into lil' cubes, add some crushed pineapple, a handful of chopped walnuts, some celery bits...mmm, good eatin'!



# What's better than a new Mac? A FREE Epson printer along with it.



## Epson Stylus C84 Ink Jet Printer

- Resolution: 5760 x 1440 optimized dpi
- Print Speed: up to 22 ppm black, 12 ppm color
- Water and light-resistant DURABrite® inks
- Individual ink cartridges
- 3-picoliter ink droplets
- Borderless 4"x 6", 8"x 10" and 8.5"x 11" photo prints
- USB and parallel ports

~~\$99~~ ORIGINAL PRICE  
- 20 REBATE\*  
- 79 REBATE\*\*

**FREE** YOUR PRICE  
EDC 517727

There's never been a better time to get a new Mac. From now until 12/31/03, when you buy a new Macintosh, you get an Epson Stylus C84 printer free after rebates. And of course, you get it with the same Mac Warehouse service and speed you can depend on. For more information on the rebates, visit [CDW.com/mw/EpsonRebates](http://CDW.com/mw/EpsonRebates).



## CDW welcomes Mac Warehouse customers.

Same account manager providing great service. Same fast delivery. Same wide selection. Same competitive pricing.

**mac**  **warehouse**®

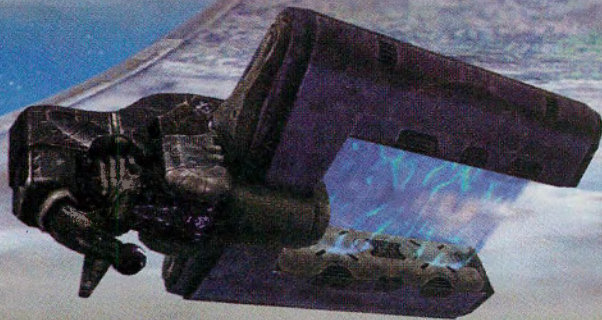
Part of the **CDW** family

**800-ALL-MACS**  
**macwarehouse.com**

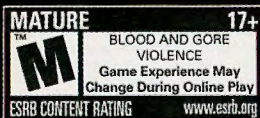
\*Receive \$20 Epson mail-in rebate when you purchase Epson Stylus C84 printer. Offer ends 12/31/03. \*\*\$79 off Epson Stylus printers with purchase of any Apple Desktop or Apple Notebook from Mac Warehouse between 10/1/03 and 12/31/03. Receive \$79 back by mail. Customer understands that CDW is not the manufacturer of the products purchased by customer hereunder and the only warranties offered are those of the manufacturer, not CDW. All pricing is subject to change. CDW reserves the right to make adjustments to pricing, products and service offerings for reasons including, but not limited to, changing market conditions, product discontinuation, product unavailability, manufacturer price changes and errors in advertisements. All orders are subject to product availability. Therefore, CDW cannot guarantee that it will be able to fulfill customer's orders. The terms and conditions of sale are limited to those contained herein and on CDW's Web Site at [CDW.com](http://CDW.com). Notice of objection to and rejection of any additional or different terms in any form delivered by customer is hereby given. © 2003 CDW Corporation



# The Circle is C



Now with online multiplayer



BUNGIE

gearbox  
software

POWERED BY  
gamespy

Microsoft  
gamestudios

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# complete

# HALO

Join the battle. Live the epic adventure yourself.

The most anticipated game in Macintosh history will be available in late November.

Unlock the secrets of Halo to save mankind from the ruthless Covenant swarms. Take the fight online in customizable head-to-head multiplayer competitions against up to 15 opponents playing on Macs and PCs. Break open a redesigned arsenal complete with the wicked new fuel rod gun. Then go mobile in the redeveloped Rocket Warthog and Banshee. This is Halo evolved.

[www.macsoftgames.com](http://www.macsoftgames.com)

**MacSoft**

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# GRAPHICS

# POWER

Adobe's new Creative Suite beautifully combines layout, illustration, and image editing.

## PRICING INFO

Adobe says CS products will be available in Fall 2003—and, no, it's not giving a more-exact date. The company also says you qualify for the Creative Suite upgrade price if you have any version of Photoshop—from Photoshop 1 on.

	Full Price	Upgrade Price
Adobe Creative Suite	\$1,229	\$749
Adobe Creative Suite Standard	\$999	\$549
Photoshop CS	\$649	\$169
Illustrator CS	\$499	\$169
InDesign CS	\$699	\$169
GoLive CS	\$399	\$169
Acrobat 6.0 Professional	\$449	\$149

## Adobe Upgrades Photoshop, Illustrator, GoLive, and InDesign

Upgrading Adobe's already massive design apps seems about as pointless as performing more plastic surgery on Michael Jackson. The first question is: "What's left to overhaul?" The second: "What's the benefit in doing so?"

But like Michael Jackson, Adobe is hell-bent on continuing to revamp. The company's latest remakes are Adobe Creative Suite (\$1,229, [www.adobe.com](http://www.adobe.com)) and Adobe Creative Suite Standard Edition (\$999). In the top-of-the-line Suite, Adobe bundles its GoLive Web-authoring, Photoshop image-editing, InDesign page-layout, Illustrator drawing, and Acrobat PDF-creation applications. Print folk can forgo GoLive and Acrobat, and pay \$230 less, by getting the Standard Edition.

Adobe has dropped version numbers and added Creative Suite (CS) branding. One important addition to the Creative Suite packages is a file-version manager called Version Cue. No longer do you need to keep track of your project versions by naming them Project1, Project2, ProjectFinal, and ProjectFinalFinal; now you simply create one project file in Version Cue and use the Save As Version commands in the individual applications to save versions within that one file.

### PHOTOSHOP CS

For better or worse, Adobe has promoted the File Browser to the central hub from which designers open and close files. The File Browser is now configurable with multiple-sized thumbnails, tabbed palettes, and the ability to flag images for quick browsing. You can also add metadata for groups of images. In Photoshop 7, you had to fill in metadata fields one image at a time.

Adobe has also added some new creative features to Photoshop CS. The new histogram palette, for example, lets you edit a histogram for each color channel—red, blue, and green in an RGB file, and cyan, magenta, yellow, and black in a CMYK file. Also, you can create an adjustment layer for 16-bit color channels—in Photoshop 7, you could only create an adjustment layer for 8-bit channels.



Photoshop CS's new, customizable File Browser serves as a hub from which designers can grab image files.



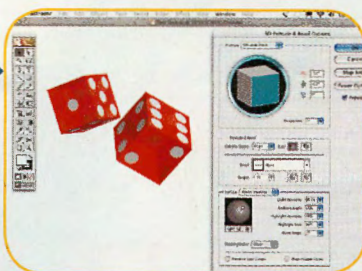
Goes  
anywhere.

## ILLUSTRATOR CS

The biggest creative addition to Illustrator CS is a simple, dialog-based method of creating 3D objects. You can turn ovals into cylinders, and squares into cubes, which you can then tilt, rotate, and shade. Mapping artwork onto a 3D shape lets you easily turn a cylinder into a can of Diet Coke.

For adding type to your Coke label, Adobe adds support for Unicode and OpenType fonts with many special characters and ligatures. Typographers will also enjoy Illustrator's new WYSIWYG font menu and paragraph styles.

Adobe has also added 250 graphic templates for invitations, labels, and business forms à la Microsoft Office, as well as a Save For Microsoft Office menu command.



Give your Illustrator CS objects 3D depth using Live Effects.

## GOLIVE CS

GoLive finally dons the familiar Adobe user interface, with tabbed palettes and zooming, plus an updated Objects palette that can dock into the top of a window like a toolbar. Like Macromedia's Dreamweaver MX, Adobe's GoLive CS has jumped on the CSS (cascading style sheets) bandwagon. GoLive has added a floating palette with a WYSIWYG interface for previewing and applying CSS styles to layouts. Adobe has also updated GoLive's support for Smart Objects, which are GoLive layout elements created in other Adobe apps, with automatic updating from the source file and hi-res previews.



GoLive CS's new hover palette lets you apply CSS formatting right from a WYSIWYG-style menu.

## INDESIGN CS

Quark's grip on the publishing world should slip a bit more with the introduction of InDesign CS. Still \$699 (nearly \$350 cheaper than QuarkXPress's list price), Adobe's layout app introduces productivity and speed enhancements, such as collapsible tool palettes that hug the sides of your display to save precious screen real estate. You can also double-click to invoke the text tool, and resizing tables automatically moves the headers and footers.

The biggest addition to InDesign is its new Text Editor, imported from good ol' PageMaker, which makes changing copy a snap. We also like InDesign CS's new nested styles, which allows you to build drop-caps, rules, bullets, or any other repetitive character style right into the paragraph style.

Chuo Dori: The main drag in fashion-rich Ginza; come see how quickly, but how well, you can spend all the money you own.

Tsukiji Central Fish Market: One of the world's best (and most likely) spots to get crushed by a flying dead tuna. Over 2500 tons of fish sold daily.

These design elements were set up automatically with InDesign CS's nested styles—great for Drop Caps too.







## DROOLWORTHY

Sexy Stuff We Can't Wait to Get Our Mitts On

### ← Robo Vacuum

OK, so it's not Mac-controlled, but hey, it's the gift-giving season—here's something for the Jetson in your life. **iRobot's Roomba Pro Elite** (\$249.99, [www.irobot.com](http://www.irobot.com)) cleans hardwood, tiled, and low- to medium-piled carpeted floors all by itself. This six-pound, foot-long, maroon orb moves in a spiral pattern, shoots over to the nearest wall, and then tangoes across the room in a straight line. It repeats this sucking shuffle for 60 to 90 minutes before its rechargeable NiMH battery needs more juice.—NR



### ← Speakers with → Bang

Only the truly jaded wouldn't drool at **Bang & Olufsen's BeoLab 5** (\$16,000, [www.bang-olufsen.com](http://www.bang-olufsen.com)) home speaker system, available in November 2003. This two-pillar, three-foot-tall behemoth (BeoSound 9000 sound system shown in middle not included) belts out 2,500 watts of amplified sound. Press a button on the loudspeaker, and the BeoLab's Adaptive Bass Control and Moving Microphone System analyzes the acoustic qualities of your room and adjusts the sound accordingly. The BeoLab 5 hooks up to your sound card or home theatre system with PowerLink, Phono, and digital S/PDIF connectors.—NR



SPEAKER PHOTOGRAPH COURTESY OF BANG & OLUFSEN; VACUUM PHOTOGRAPHY COURTESY OF IROBOT





Now all new  
PowerBooks sport  
an aluminum skin.

## APPLE DITCHES TITANIUM AND WIRES

PowerBooks Revamped and Bluetooth Mouse and Keyboard Unveiled

**T**itanium and wires are going the way of the Newton. At this September's Paris Mac Expo, Apple unveiled a revamped PowerBook line with faster speeds and aluminum cases. It also announced a new Bluetooth mouse and keyboard.

### NEW POWERBOOKS

The slowest PowerBook G4s now run at a speedy 1GHz. Apple ditched the 867MHz 12-inch and 15-inch models and is now shipping a five-Book line that ranges from a 1GHz 12-inch PowerBook to a 1.33GHz 17-incher (see "The Fab Five," below). Also gone are L3 caches, although 512KB of on-chip L2 cache is included on all five models. Build-to-order options include up to 2GB RAM in the 15 and 17, up to 1.25GB RAM in the 12, and a faster 5,400-rpm 80GB hard drive for both the 15 and 17—stock drives on all five models poke along at 4,200 rpm. (See our review of the 15-incher on p56).

Processor speed isn't the only thing that's different. Apple replaced the 15's Titanium case, with the hardy aluminum of both the previous and current versions of the 12 and 17. All models have Bluetooth and one USB 2.0 port, and both 15s and the 17 have a FireWire 800 port. Although the 12 misses out on the faster FireWire, it does get an upgrade from VGA to a proprietary mini-DVI port (standard-DVI and -VGA adapters are included). All models should be available by the time you read this.

### THE FAB FIVE

If the new PowerBooks were a basketball team, Mugsy Bogues would go for \$1,599 and Yao Ming would command \$2,999.

	\$1,599	\$1,799	\$1,999	\$2,599	\$2,999
Display size	12.1 inches	12.1 inches	15.2 inches	15.2 inches	17 inches
Resolution	1024 by 768	1024 by 768	1280 by 854	1280 by 854	1440 by 900
Processor speed	1GHz	1GHz	1GHz	1.25GHz	1.33GHz
DDR SDRAM	256MB	256MB	256MB	512MB	512MB
Optical drive	Combo drive	SuperDrive	Combo drive	SuperDrive	SuperDrive
Hard drive	40GB	40GB	60GB	60GB	80GB
AirPort Extreme	Ready	Ready	Ready	Built-in	Built-in

### BLUETOOTH MOUSE AND KEYBOARD

Apple also introduced a new, blinding-white Bluetooth keyboard (\$69) and Bluetooth mouse (\$69), which work with Macs running OS 10.2.6 and later, and have a 30-foot range and 128-bit encryption. The keyboard runs on four AA batteries, the mouse on two. Apple says battery life is three months for the mouse and nine for the keyboard.—NR



Apple's new Bluetooth  
keyboard (right) and mouse  
(left) operate up to 30 feet  
away from your Mac.



Carries  
anything.





## GHOULS RULE

Ghost Master Combines Sims with Séance

**G**host Master puts you in command of a ghoulish hoard whose mission is to haunt the living. Your team starts out with eight ghosts (including poltergeists and gruesome horror hags) that use scare tactics, such as levitating books and jinxing home appliances, to achieve objectives like clearing a sorority house full

of coeds in bath towels and inducing townsfolk to free a walled-up skeleton.

### Ghost Master

Price	TBA
Available	Halloween 2003
Feral Interactive www.feral.co.uk	



**If The Sims made a horror movie, it would like Ghost Master.**

Combining the look and feel of The Sims with the game mechanics of Sim Theme Park, and adding a tomb-load of B-movie horror flavor (including Weird Séance and Blair Wisp Project game levels), Ghouls Master is a paranormal pleasure.—*Matt Osborn*

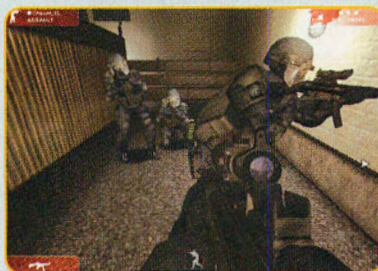
## MADMAN TAKES HOSTAGES

Team Rainbow Brings Them Home Alive

**J**ust when you thought you saved the world from terrorists in Rainbow Six and Rouge Spear, they're back for more in Rainbow Six 3: Raven Shield. You're equipped with weaponry and can employ team tactics—for example, you can order team members to open doors while you activate a flash-bang grenade. Or you can use the observer mode to coordinate your operation from afar.

### Tom Clancy's Rainbow Six 3: Raven Shield

Price	\$49.99
Available	October 2003
Aspyr www.aspyr.com	



**Use team tactics in Raven Shield.**

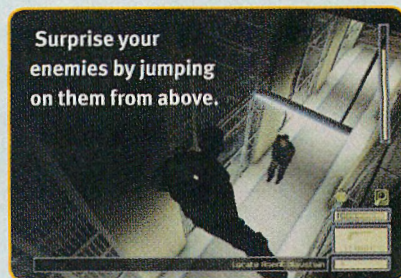
Just like the rest of the series, Raven Shield is a first-person perspective, squad-based tactical shooter. Players of Ghost Recon will find Raven Shield's close-quarters fighting style and new audio cues a treat.—*MO*

## RULES OF ENGAGEMENT

Tips for Tom Clancy's Splinter Cell

**T**om Clancy's Splinter Cell, a thrilling shooter in which you play a highly trained U.S. operative, requires that you make the most of your secret agent know-how, acrobatics, and gadgets to outmaneuver high-tech terrorists. Here are a few tips.—*MO*

**Surprise your enemies by jumping on them from above.**



- Always cycle through vision modes. If you don't, you could miss clues.
- Use thermal vision to see through some thin and lightweight materials.
- Break lights to conceal yourself in shadows—but don't tip off enemies.
- Lose dogs following your scent by walking in water.
- Hide your victims so the enemy can't revive them or raise the alarm.
- Roll through fire to avoid damage.
- Jumping on your enemy from above is silent and deadly.

### Tom Clancy's Splinter Cell

Price	\$49.99
Available	October 2003
Aspyr www.aspyr.com	

- Practice jumping, and use the in-game camera to get close to roof edges.

## HITCH YOUR MAC TO YOUR PLAYSTATION 2

GameShark Puts your Media on your TV

**I**f you own a PlayStation 2 console with an online network adapter and a Mac running OS X, you can now curl up

### GameShark Media Player

Price	\$49.99
Available	Now
Mad Catz Interactive www.madcatz.com	

on the couch and watch MacAddict Staff Videos on your TV. Console

accessorizer Mad Catz has released the GameShark Media Player, which lets you run music, video, and images from your Mac to your television via PS2 (LAN cable not included). The GameShark supports image resolutions up to 720 by 320 pixels, letterbox video, and parental controls.—*MO*



**GameShark Media Player brings video, music, and photos from your Mac to your TV.**



# WITH NEW PALMS COME NEW ACCESSORIES

With all the hoopla surrounding feature-rich cell phones, PDAs feel as forgotten as Old Navy capris. To remind us otherwise, Palm announced the Tungsten T3 and the Zire 21 (check out both in "The Ultimate Gadgets Guide," p35). Here are some good-looking accessories that go with them. For more information, check out Palm's Web site ([www.palm.com](http://www.palm.com)).—NR

## CAMERA CARD

**\$99.95; Available: November 2003**

This 1.3-megapixel camera snaps into your Palm PDA's expansion slot; shoots 24-bit JPEGs at up to 1280-by-1024-pixel resolution; and features manual focus, digital zoom, and video capture.



## PALM WIRELESS KEYBOARD

**\$69.95; Available: Now**

This keyboard works with all Palm models running Palm OS 4 or later and wirelessly connects through the handheld's infrared port.



## HARD CASES

**\$39.95 (Tungsten), \$14.95 (Zire); Available: Now**

Palm is offering a variety of metal and hard-plastic cases for Zires and Tungstens—complete with spring-open tops and room for expansion cards.



## NEWS OF THE MONTH

### VIRGINIA TECH TO BUILD G5 SUPERCOMPUTER

Virginia Polytechnic Institute and State University (aka Virginia Tech) is building a one-of-a-kind multimillion-dollar supercomputer using 1,100 Dual 2GHz Power Mac G5s. Just how fast will it be? Benchmarks should be available by the time you read this.

### APPLE VS. APPLE

Apple is getting sued once again by Apple—Apple Corps, that is, the Beatles' (yeah, that old band) management company that makes news from time to time by taking Apple Computer to court over trademark infringement. This time, Apple Corps is contesting the use of the Apple brand on the iTunes Music Store. Currently, no Beatles music is available through iTunes or any other online music service.

### APPLE GAINS IN NOTEBOOK MARKET

In a recent report on notebook computer sales, IDC found that Apple Computer garnered 7 percent of the U.S. notebook market, putting the company in fifth place behind HP, Dell, Toshiba, and IBM. This figure is more favorable than Apple's 3.8 percent share of the overall U.S. PC market, as reported in a July 2003 IDC report. An Apple spokesperson also told us that during the company's most recent fiscal quarter, ending in June 2003, laptops accounted for 42 percent of system sales.

### FIREWIRE IN THE DICTIONARY

The scholarly Oxford English Dictionary sanctioned a new word this August. *FireWire* is defined as "a standard high-performance serial bus for connecting devices to a personal computer."

Fits  
everyone.





# OVERHEARD AT APPLELORE

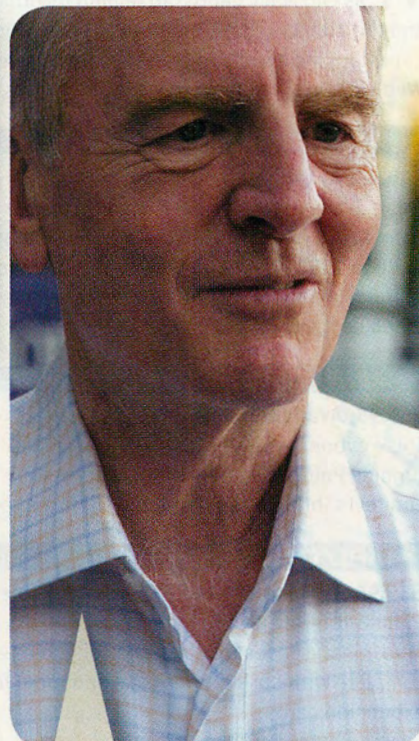
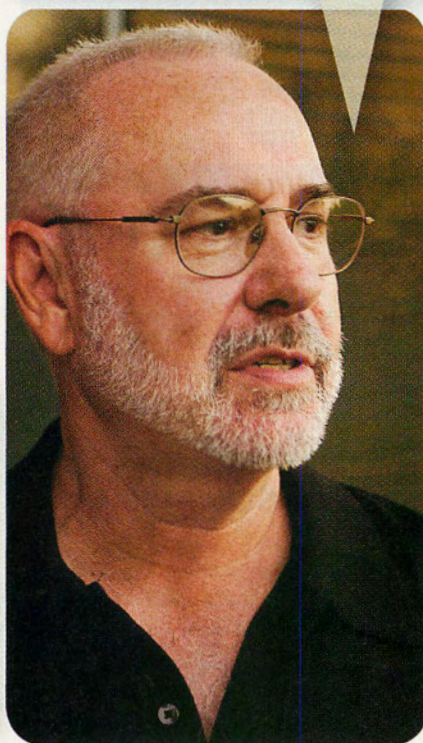
Ex Apple Employees Gather and Gossip

On September 13, more than 1,000 Apple devotees and ex-employees gathered at the Mountain View, CA, Computer History Museum—less than 10 miles from Apple's Cupertino headquarters—at an event dubbed AppleLore. While reliving the old days, here's what a few of the luminaries had to say.—*Bryan Chaffin*



**Apple Fellow and former Microsoft software architect Steve Capps on the difference between Apple and Microsoft products:** "I can tell you exactly why Apple products come out so good and Microsoft products come out so bad. At Apple, nobody sits down and says, 'This is what we're going to ship.' The product is the god to which we all pray. At Microsoft, the schedule and the plans are the god."

**Former Apple COO Del Yocam on successfully working with Steve Jobs:** "I knew [that] in order to succeed with him, I was going to have to do my homework. I did that very early on, so that when I was in staff meetings or board meetings I could say, 'Steve, now, that's not true, that's bullshit. Here's what happened, bam, bam, bam, and bam.' Once I was able to hold my own, he and I got along much better."



**Former Apple CEO John Sculley—who left under a cloud ten years ago—was very diplomatic, all things considered:** "Apple people have one thing in common, and that is to change the world with products that have no compromises. You can see that from the very beginning, as laid down by founders Steve Jobs and Steve Wozniak, and [it] continues until today."

PHOTOGRAPHY BY JOERN BLOHM

## SHAREWARE PICK OF THE MONTH

# WIRETAP YOUR MAC

Ambrosia Software [www.ambrosiasw.com](http://www.ambrosiasw.com) Free

If you're frustrated because you can't record your favorite Internet-streamed radio programs, WireTap can help you out. A simple floating palette of three buttons—record, stop, and pause—WireTap records any audio coming through your Mac and saves it to your hard drive.—AT

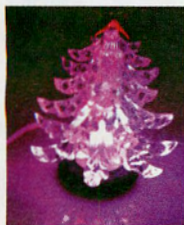
Record any and all audio streaming to your Mac with WireTap.





# MERRY XMACS

Your Mac can now share in the holiday cheer—just plug Addlogix's USB Christmas Tree Light (left; \$9.99, [www.addlogix.com](http://www.addlogix.com)) into an available USB port, and watch as three inches of plastic cheer cycles through six jolly colors.



Not festive enough? Step up to the USB Christmas Tree (right; \$69, [www.tkny.com](http://www.tkny.com)) from the Japanese company, e-let's. In addition to twinkling LEDs and a fan-driven Styrofoam snowstorm, this tree-in-a-globe plays 12 Christmas tunes. In the U.S., it's only available at New York's hyperhip Tkny boutique, and supplies are extremely limited—only 500 have been distributed worldwide.—*Rik Myslewski*



## NEW STUFF

### THE REBEL GOES DIGITAL

**What it is:** This 6.3-megapixel CMOS camera comes with a compact EF-S 18-to-55mm, f-3.5 to f-5.6 zoom lens; eight preset white-balance modes; and 7-point Wide-Area auto-focus technology. The camera outputs six types of JPEG formats, as well as raw images.

**Why it's cool:** This is the first digital offering in Canon's popular EOS Rebel SLR line.

#### Canon EOS Digital Rebel

[www.usa.canon.com](http://www.usa.canon.com)  
\$999 (\$899 without lens)  
Available: Now



### BETTER POWERBOOK BATTERIES

**What it is:** Newer Technologies says its PowerBook Lilon batteries run 30 percent longer than Apple's own batteries. The batteries support Wallstreet, Lombard, and Pismo PowerBook G3s as well as 15-inch Titanium PowerBook G4s.

**Why it's cool:** You can never be too thin, too rich, or have too much battery life.

#### NuPower Lithium Ion Batteries

Newer Technologies  
[www.newer-tech.com](http://www.newer-tech.com)  
\$139.99 to \$149.99  
(depending on model)  
Available: Now

### AFFORDABLE, ATTRACTIVE MULTIFUNCTION

**What it is:** This multifunction USB device triples as a 1,200-by-2,400-dpi, 48-bit scanner; four-color printer; and color copier.

**Why it's cool:** It's stylish, compact, and reasonably priced.

#### Epson Stylus CX5400

[www.epson.com](http://www.epson.com)  
\$149  
Available: Now



### ANALOG-TO-DIGITAL CONVERTER

**What it is:** This device connects to composite- and component-video, as well as S-Video sources, to convert analog video to digital video, and vice versa. It can also convert directly between analog and digital devices without involving your Mac.

**Why it's cool:** This simple, compact device is the affordable way to extract video from your old VHS tapes and convert it to DV.

#### Pyro A/V Link

ADSTech  
[www.adstech.com](http://www.adstech.com)  
\$199  
Available: Now



### PALM UPDATES \$99 PDA

**What it is:** Palm updated its consumer-level Zire PDA with the latest Palm OS 5.2.1, 8MB of memory, and a software CD.

**Why it's cool:** The new Zire has four times the original's 2MB of memory, so there's actually room enough to install software from the CD.

#### Palm Zire 21

[www.palm.com](http://www.palm.com)  
\$99  
Available: Now



# Introducing the Memorex ThumbDrive.

## A whole new way to carry your files.



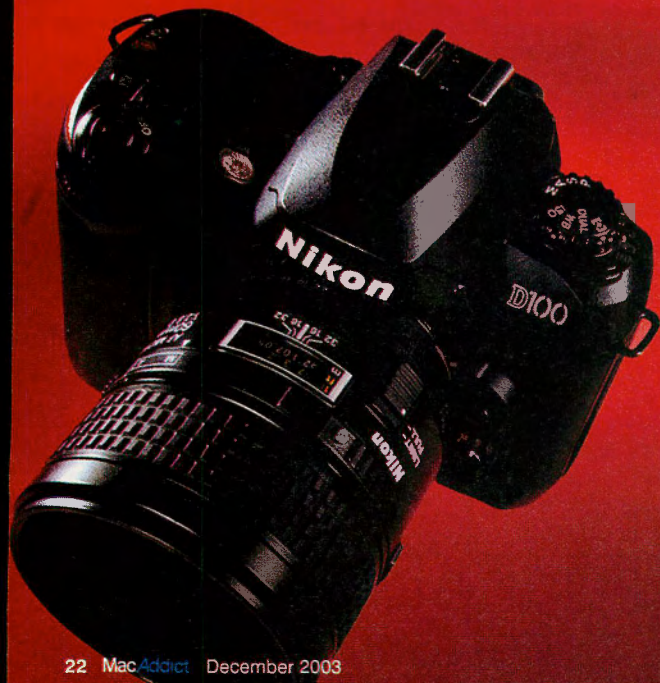
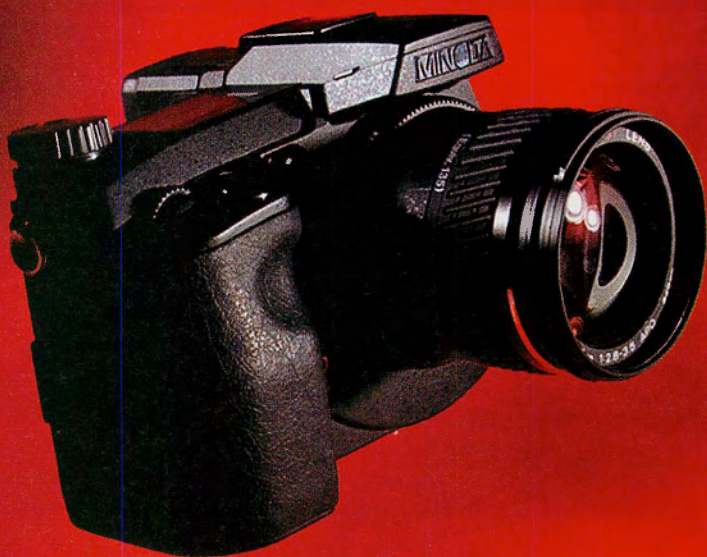
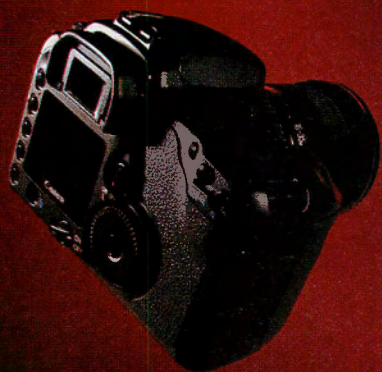
Whether you're looking for performance or style, the Memorex ThumbDrive® wins hands down. Incredibly small and durable, this beautifully sculpted drive represents the very best of Flash technology. With capacities ranging from 128MB to 1GB, it transfers tons of photos, music or data at rates up to 50% faster\* than competitive USB™ 2.0 products. And the USB connection means it's compatible with both PC and Macintosh®, as well as many portable electronic devices. The go-anywhere, carry-everything, sleekly-styled ThumbDrive from Memorex—this thumb deserves a hand.



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\*Based on competitive published information









# DIGITAL CAMERA SHOOT-OUT

**MACADDICT  
ROUNDS UP  
THE NEWEST  
DIGITAL CAMERAS  
AND PLAYS  
FIRST-PERSON  
SHOOTER TO FIND  
OUT WHICH ONES  
COME OUT ON TOP,  
AND WHICH ONES  
BITE THE DUST.**

by Kris Fong

**C**hoosing a digital camera is a lot like choosing a life partner. While looks, flash, and holdability matter, quality, focus, and performance are the real keys to making your choice—plus knowing which buttons not to push so you can avoid noisy incidents. But how can you make the right choice when all you have to go on are a picture of your prospect and its stats?

You can't—so we're here to help. We rounded up 13 of the most popular digital cameras on the market today and divvied them up into two categories: compact point-and-shoots and higher-end prosumer cameras. We then shot hundreds of photos over three weeks to find out how well each camera performed, to determine what its image quality was like, and ultimately to decide which cameras were worthy of your consideration and which ones should simply be shot—dead. We also took a look at three professional-level digital SLRs (single lens reflex cameras) for those of you with a little more experience and a lot more cash. Here's how each camera wooed us, shot-by-shot.





Normally, we don't like playing by the rules, but we set up a few to keep the camera competition fair.

**1** We chose cameras with equal characteristics and features within their categories.

**2** We snapped multiple images of every scene using each camera's auto and user-tweakable controls, and then selected the best shot as the final, ratable candidate for that particular scenario (see this month's Disc for some of these test photos).

**3** We rated each final candidate image on its exposure balance, color accuracy, quality and detail, and focus. We then averaged each of these ratings across all final candidates from the different scenes we shot to get a camera's final image ratings.

**4** We also judged cameras on flash handling; performance (write speeds, feature handling, reliability); usability (menu navigation, access to controls, handling); and battery life. We combined these scores with the image ratings to get our final scores.

**5** The prices we quote are generally list prices, not street prices. Because camera prices vary so much, we didn't judge cameras on value—you can usually find cameras selling for much lower than their list prices, so it would be unfair for often-fluctuating street prices to affect our ratings.

## Point-and-Shoot Cameras

**T**hese affordable cameras offer no-fuss operation in full-auto mode, yet give you some controls to eke out the best image for each situation. All cameras in this category have compact bodies, resolution in the 3-megapixel range, a minimum of 3x optical zoom, user-selectable exposure modes, and white balance (the ability to set the camera for differing lighting conditions so that white looks white, which makes colors more accurate). These cameras provide enough resolution to print an 8-by-10-inch image at 200 dpi (dots per inch). See "Camera Tech Specs" on this month's Disc for the detailed, manufacturer-stated specs for all cameras.

**»The Targets** We took these cameras out to shoot scenery in natural light on a freakishly hot and sunny San Francisco day, and again on an overcast day. We then brought them into the studio to shoot in artificial light. Here's how they stacked up in both image quality and handling.

**»Exposure Balance** Under cloudy skies, all cameras performed well. However, once we allowed the sky to creep into much of the frame, quality varied because cameras often see overcast sky as near-white and respond by darkening all non-sky objects to average the light and produce what it thinks is a balanced exposure.

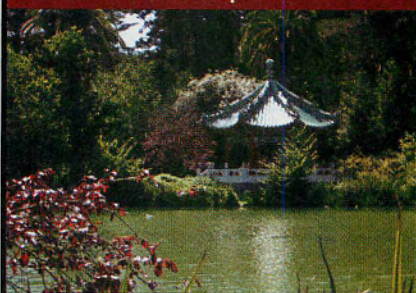
The HP, Nikon, Olympus, and Sony cameras handled light-averaging the best, providing good detail even in shadowy areas. The Kodak was temperamental—it either overexposed everything or underexposed the subject to expose the sky correctly. We prefer the latter, knowing that underexposure preserves image data and that we can easily fix them in an image editor, while overexposure obliterates image data.

With a high noon sun and a lake full of harsh reflections, all images suffered from some *blowout* (overexposure), but the Minolta snagged the best images, preserving detail better than the rest. The Nikon, Olympus, and Pentax cameras fared decently, though the

### POINT & SHOOT

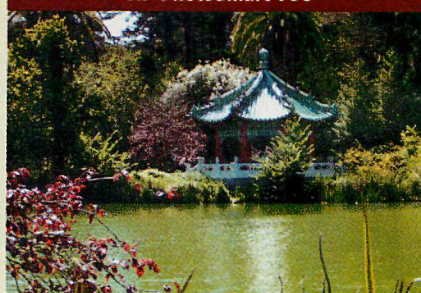
### [Exposure Balance]

Pentax Optio S



The Pentax gave us just the right amount of exposure when faced with a tricky situation.

HP PhotoSmart 735



In harsh light, every photo we took with the HP PhotoSmart 735 showed a subtle, textured ghost running through center-right. Where were Bill Murray and his proton pack when we needed them?



Olympus image showed some *blooming* (a halo effect that appears when a bright area borders a dark area). The HP camera's results were absolutely abysmal—all images were possessed by a weird, textured aberration that streaked across the subject.

Under blue skies, the Olympus produced the best exposures with the least amount of *noise* (off-color pixel artifacts). Canon and Nikon also performed well, producing images with good detail in shadowed areas. The rest

required some futzing with the exposure compensation, though all handled bright, sunny days admirably.

Indoors, all cameras had decently balanced exposures, though images from the Kodak, Minolta, and Pentax came out darker than what their LCDs displayed. The Canon overexposed highlights. In our flash test, where we flashed our subject (in the G-rated kind of way) from about 5 feet away, the Pentax smoked the competition, offering even exposure across our subject and

backdrop. The Olympus produced a nice exposure, but didn't have the same detail in shadowy areas as the Pentax. Both the Kodak and Minolta flashes were weak, which underexposed their images.

» **Color Accuracy** All cameras handled color well, though none was completely accurate. The Canon, Minolta, and Olympus were the most consistent in capturing realistic color both indoors and out—though all models had their share of hits and misses.

## THE POINT & SHOOT COMPETITORS

### Canon PowerShot A70

PRICE \$449.99

WEB SITE

[www.usa.canon.com](http://www.usa.canon.com)

RESOLUTION 3 megapixels

ZOOM 3x optical zoom

COMES WITH 16MB

CompactFlash (CF) card



### Minolta DiIMAGE xT

PRICE \$399.99

WEBSITE [www.minoltausa.com](http://www.minoltausa.com)

RESOLUTION 3.2 megapixels

ZOOM 3x optical zoom

COMES WITH 16MB SD card,

rechargeable battery,

recharging dock



### Nikon Coolpix SQ

PRICE \$449.95

WEBSITE [www.nikonusa.com](http://www.nikonusa.com)

RESOLUTION 3.1 megapixels

ZOOM 3x optical zoom

COMES WITH 16MB CF card,

rechargeable battery, recharging dock



### HP PhotoSmart 735

PRICE \$299.99

WEBSITE [www.hp.com](http://www.hp.com)

RESOLUTION 3.24 megapixels

ZOOM 3x optical zoom

COMES WITH 16MB internal storage with support for MultiMedia Cards and Secure Digital cards



### Kodak EasyShare DX6340

PRICE \$329.95

WEBSITE [www.kodak.com](http://www.kodak.com)

RESOLUTION 3.1 megapixels

ZOOM 4x optical zoom

COMES WITH 16MB internal storage with support for MMC and SD



### Olympus D-560

PRICE \$399.95 WEBSITE [www.olympusamerica.com](http://www.olympusamerica.com)

RESOLUTION 3.2 megapixels ZOOM 3x optical zoom

COMES WITH 16MB xD Picture Card

### Pentax Optio S

PRICE \$399.99

WEBSITE [www.pentax.com](http://www.pentax.com)

RESOLUTION 3.2 megapixels

ZOOM 3x optical zoom

COMES WITH 11MB internal storage with support for MMC/SD, rechargeable battery and charger



### Sony CyberShot DSC-P8

PRICE \$499.95

WEBSITE [www.sony.com](http://www.sony.com)

RESOLUTION 3.2 megapixels

ZOOM 3x optical zoom

COMES WITH 16MB Memory Stick, rechargeable battery, charger





## [Color Accuracy]

## [Quality &amp; Detail]

Olympus D-560



Lick this—the Olympus churned out perfect color in our lollipop series.

Kodak EasyShare DX6340



Under sunny skies, the Kodak displayed little noise in its images, though it did raise a fuss in lower lighting.

Nikon Coolpix SQ



The Nikon studio images had a slight green cast—this camera preferred the outdoors when it came to seeing colors the right way.

Canon PowerShot A70



Though the exposure balance was nice, this Canon photo had a lot of noise in the darker areas of the image.

Outdoors, this trio displayed consistent color under sunny blue skies or clouds, though the Olympus tended to saturate color more than the others—and not in a happy, Disney kind of way.

Indoors with a vase of flowers lit by

tungsten (common household lighting) floodlights, the Canon, HP, Kodak, and Minolta images displayed the most accurate color. The Nikon's color skewed toward a green colorcast, the Olympus's images were tinged yellow, and the Sony

images looked orangey. Luckily, these freakish colors only appeared in this particular photo session.

We also shot close-up macro images of small lollipops, working as quickly as we could before our poor lollies turned to Kool-Aid under the hot lights. The Canon, HP, Kodak, Minolta, and Olympus cams performed impressively, producing nearly perfect color accuracy, though the other candidates also performed well.

In our flash images, the Canon, Nikon, and Pentax ones displayed the most-accurate color. The Nikon and Sony cameras had flash white-balance settings that we used (we set all other cameras to auto white balance), but the Sony images came out a bit warm—not bad but not accurate. The yellowish HP image looked like our cat peed on it. The Kodak, Minolta, and Olympus images took on the color of the flash—a cold, blue tinge.

### Picture Quality and Detail

We expected a fair amount of image noise due to the fact that these cameras capture compressed JPEGs (only the Minolta offers a higher-quality TIFF option)—and that's exactly what we got. The Olympus and HP displayed the least amount of noise. The Nikon had some noise, but it was more like a uniform film grain than the usual off-color pixel patterns that can seriously degrade an image. These three produced the sharpest, most detailed images without image softness—unlike the Canon, Kodak, Minolta, Pentax, and Sony

### The Scores Here's how our point-and-shoot cameras fared in our ratings.

POINT & SHOOT	Image Quality				Camera Handling						
	Price \$	Exposure Balancing	Color Accuracy	Quality & Detail	Focus	Flash	Performance	Usability	Battery Life	Score %	Rank
Olympus D-560	399.95	9	9	8	9	9	8	8	7	85.0	1
Nikon Coolpix SQ	449.95	9	8	8	9	8	9	8	7	84.0	2
Canon PowerShot A70	449.99	8	9	7	8	7	9	10	10	83.5	3
Pentax Optio S	399.99	8	8	7	9	10	9	7	9	83.0	4
Sony CyberShot DSC-P8	499.95	8	8	7	7	8	8	8	10	78.0	5
Minolta DiIMAGE xT	399.99	8	9	7	8	5	8	7	8	76.0	6
Kodak EasyShare DX6340	329.95	8	8	7	8	6	6	6	8	71.5	7
HP PhotoSmart 735	299.99	7	8	8	6	6	5	6	9	67.5	8
Test weighting		15%	15%	15%	15%	10%	15%	10%	5%		

\* Ratings on a scale from 1 to 10, 10 being the highest.



# [ Compare & Contrast ]

cameras, where image softness was a common problem.

Under sunny skies—a condition in which we expected to see the least amount of noise—all cameras performed well, though Kodak's images were the cleanest. Under clouds, the Kodak, Minolta, Pentax, and Sony images got belligerently noisy in the shadows, though images from all cameras had a fair amount of noise when shooting in this light. With artificial light, all cameras partied hearty with their noisemakers, and the Kodak showed some *bleeding* (color from the subject seeping into the background).

## Canon, Minolta, and Olympus were the most consistent in capturing realistic color.

**» Camera Handling** We enjoyed shooting with the Canon the best. Had it not been for its soft image quality and anemic flash, this camera might very well have taken top honors. The Sony also handled well, and its menus and controls were easy to use. The Olympus has a solid feel with easy-to-use controls, but its lens acted up, constantly retracting and re-engaging itself during low-battery situations. Plus, sometimes when we wanted to power off the camera, we had to slide the lens cover back and forth until the lens retracted—sliding the cover into its extended lens makes it retract. It also ate through batteries with frenzy.

Shooting with the swivel-lens Nikon and the miniature Pentax took a little getting used to. Both cameras feature uncomplicated menus, but accessing the Pentax's menus with its tiny controller is tricky. Navigating menus with the Minolta is easy, but its corner lens placement caught our fingers in the frame a couple times. Strangely, although the Minolta lacks a macro mode setting, it is one of the best at capturing close-ups.

### Olympus D-560



Best color accuracy and balanced exposures, but eats batteries.



**PERKS** Best outdoor color accuracy. Sharp images with well-balanced exposures. Biggest LCD. Sliding lens cover serves as power mechanism, so no accidental power-ups.

**QUIRKS** LCD resolution isn't great. When batteries run low, the lens retracts and re-engages without any low-battery indication. Devours batteries.

### Nikon Coolpix SQ

**PERKS** Good exposure balance. Grainy-but-sharp images. Even-toned exposures. Quick autofocus. Good at close ranges. Swivel lens allows for creative angles.

**QUIRKS** Green colorcast with custom white-balance setting. No white-balance preview. Hard to hold with swivel lens. Lens cap's coiled tether makes button access hard.



Great exposure balance and sharp images, but white-balance settings were off.



### Canon PowerShot A70



Nice color accuracy and exposures, but soft and noisy image quality.



**PERKS** Favorite camera to shoot with due to excellent controls and gripability. Solid feel. Great battery life. Nice features (such as auto and manual controls). Very good color accuracy.

**QUIRKS** Images a bit noisy and soft. Weak flash. Camera has a mirror frame around the LCD—an eyesore when shooting in bright sun.

### Pentax Optio S

**PERKS** Smallest camera. Excellent macro. Nice color. One of the best at focusing. Excellent flash—on par with prosumer cameras. Features 3D and time-lapse photography.

**QUIRKS** Some dark exposures. Soft images in lower light. Navigation pad tiny (nail-tip sensitive controls prone to accidental selections).



Best flash with great focusing, but images were soft and noisy.





POINT & SHOOT  
[Compare & Contrast]

Sony CyberShot DSC-P8



Fun to shoot with, but the images were somewhat noisy with some color shifts.



**PERKS** Excellent battery life. Small. Easy-to-use controls and menu navigation. Supports USB 1.1 and 2.0. Three levels of flash adjustment. Provides image histogram on the LCD.

**QUIRKS** Some focusing problems at closer ranges. Soft, somewhat noisy images. Some color shifts. Painfully slow LCD redraw rate.

Minolta DiMAGE XT

**PERKS** Reproduces color better than most. Great macro capabilities. Best performer in harsh light. Supermodel slim. Lightning-quick startup time. Supports TIFF and JPEG.

**QUIRKS** Weakest flash of the bunch. Easy to block lens with fingers. Soft, noisy images. Limited user controls. Images on the LCD appear brighter than actual captured images.



Nice color accuracy, but exposures were a bit dark and images were noisy.



Kodak EasyShare DX6340



Realistic color, but some noise, color bleeding, and halos.



**PERKS** Produces some of the best, most accurate color. Good image quality when shooting under blue skies.

**QUIRKS** Some color bleeding, halos, and noise. Weak flash. Tends to produce dark images but preserves detail. Shutter lag. Images soft along the edges.

HP PhotoSmart 735

**PERKS** At times, produces really good-looking images. The most affordable of the bunch. Great battery life.

**QUIRKS** Barebones features. Erratic performance. Weak flash. Fussy macro focusing. Clunky handling. LCD pixelated and displays motion trails. Indicates focus when not in focus. Bad in bright light.



A mixed bag of really great and really bad exposures.



**We expected a fair amount of image noise—and that's exactly what we got.**

The HP is big and clunky, its buttons feel cheap, and its menus are ugly. Navigation is easy, but then again, there aren't many options to scroll through. The Kodak's a bit bigger than the rest of the pack, and mode selection is annoyingly time-consuming, as the camera pauses at each shooting mode as you turn the selection dial.

**»Overall** We'd buy the Olympus D-560 and Nikon Coolpix SQ. We'd be happy with the Canon PowerShot A70 and Pentax Optio S. We feel pretty lukewarm about the Sony CyberShot DSC-P8 and Minolta DiMAGE xT. And we definitely think you should stay away from the Kodak EasyShare DX6340 and HP PhotoSmart 735.

POINT & SHOOT  
(A-list)

**»First** Olympus D-560. This camera produces well-balanced exposures, and good image quality and color handling. It gave us consistent images with a great amount of detail. Also, investing in a set of rechargeable batteries should alleviate the low-power lens shenanigans we experienced.

**»Second** Nikon Coolpix SQ. This camera produces images with good detail and sharpness, but its color accuracy isn't on par with the Olympus D-560.

**»Third** Canon PowerShot A70. We love this camera's handling, but its images are a bit soft and noisy.



### Canon PowerShot G5

**PRICE** \$799.99  
**WEBSITE** [www.usa.canon.com](http://www.usa.canon.com)  
**RESOLUTION** 5 megapixels  
**ZOOM** 4x optical zoom  
**SUPPORTS** RAW  
**COMES WITH** 32MB CF card, infrared remote, rechargeable battery, charger



### Minolta DiIMAGE 7Hi

**PRICE** \$1,299  
**WEBSITE** [www.minolta.com](http://www.minolta.com)  
**RESOLUTION** 5 megapixels  
**ZOOM** 7x optical zoom  
**SUPPORTS** TIFF and RAW  
**COMES WITH** 16MB CF card, rechargeable batteries, charger



### Olympus C-5050

**PRICE** \$799  
**WEBSITE** [www.olympus.com](http://www.olympus.com)  
**RESOLUTION** 5 megapixels  
**ZOOM** 3x optical zoom  
**SUPPORTS** TIFF and RAW  
**COMES WITH** 32MB xD card (also supports CF, SmartMedia, and IBM Microdrive), rechargeable batteries, charger



### Nikon Coolpix 5400

**PRICE** \$799.95  
**WEBSITE** [www.nikonusa.com](http://www.nikonusa.com)  
**RESOLUTION** 5.1 megapixels  
**ZOOM** 4x optical zoom  
**SUPPORTS** TIFF  
**COMES WITH** 16MB CF card, rechargeable battery, charger



### Sony Mavica CD500

**PRICE** \$699  
**WEBSITE** [www.sony.com](http://www.sony.com)  
**RESOLUTION** 5 megapixels  
**ZOOM** 3x optical zoom  
**SUPPORTS** TIFF  
**COMES WITH** 156MB CD-R and 156MB CD-RW (writes images onto 3-inch CD-R/CD-RW)



## Prosumer Cameras

**T**hese cameras give you the benefit of snapping pics on autopilot when you're feeling lazy, or engaging the aperture, shutter, and focus controls for full creative control over images—all without the bulkiness or expense of a professional digital SLR camera (see "Get Serious—Get an SLR," p32). All cameras in this group feature full auto and manual controls, a 5-megapixel resolution, a minimum 3x optical zoom, and user controls for white balance and exposure. These cameras provide enough resolution to print a 9-by-13-inch image at 200 dpi.

**»The Targets** We took this bunch out and about for a couple of days in the city. Unfortunately, the sun never came out to provide us with bright, blue skies, and the fog chased us away from a few locations—that's San Francisco weather for ya. We also shot under tungsten floodlights in our studio.

**»Exposure Balance** With bright gray skies overhead, we shot in full auto mode and then worked each camera's

manual controls to make sure our subjects were well exposed without overexposing the sky. All cameras did well, but the Nikon produced good, even exposures more consistently than the others. In high-contrast situations where we shot brightly backlit subjects in the shade, all images except the Nikon's showed pronounced blooming and some purple *fringing* (purple pixels that line contrasting borders) where subject met bright overcast sky.

Indoors, the Sony images were stunning, with the Nikon close behind. The Canon, Minolta, and Olympus cameras performed well, though their exposures came out a bit darker than how they appeared on their LCD screens. All cameras produced good detail—even in dark areas, like the (fake) wood grain of our sushi tray and the subtle shadows between rice grains.

In our flash test, the Minolta came out on top, producing beautifully lit images that evenly exposed our subject and backdrop. The Canon, Olympus, and Sony also flashed balanced exposures. The Nikon flash created a balanced exposure but was the weakest.

**»Color Accuracy** Hands down, the Sony delivered the most real-looking color, shot-for-shot, with no added saturation. We were especially impressed with the camera's sushi-



PROSUMER

## [Color Accuracy]

## [Quality & Detail]

Minolta DiMAGE 7Hi



With the Minolta, not only was the flash excellent, but so was its color in this series.

Sony Mavica CD500



Displaying very little noise, the Sony's images were consistently sharp and richly detailed.

Olympus C-5050



Every camera had its good shots and bad, and this Olympus flash picture's steely coldness put it into the latter category.

Canon PowerShot G5



Though this Canon image looked good at this magnification, zooming in revealed some image softness.

## Hands down, the Sony Mavica CD500 delivered the most real-looking color.

and Sony displayed the most accurate colors. Though the Canon's flash provided enough light, the images displayed a yellow colorcast. The Olympus's flash images were cool-toned.

### Picture Quality and Detail

Shooting high-resolution TIFFs, we expected nothing but clean images with a minimum amount of noise. For the most part, both the Nikon and the Sony delivered sharp images with few image artifacts. The Nikon produced the cleanest images overall, and the Sony produced the best detail. The Canon's images—while not noisy—tended to display image softness in the highlights or lighter color areas, though the images were sharp in other areas. The Olympus and the Minolta cameras played noisy neighbors in lower light situations and in image shadows.

In overcast light, the Nikon created squeaky clean images. The Sony, for the most part, produced clean, sharp images, though we found some noise in shadowed areas. In artificial light, all photos displayed some amount of noise in the darker colored areas, but really not enough to detract from the overall image quality.

composition images, which displayed perfect color accuracy and clean, well-balanced exposures. The other cameras produced good color, though all had their share of hits and slight misses. The Nikon's custom white balance skewed toward green, but its presets were fine.

In our mushroom macro shot in which we shot tone on tone, none of the

cameras captured the color the way we remembered it, though the Sony picked up the right light coloring (we shot this under a cyan-cast, cloudy sky). The Canon and Nikon images were warmer-toned than reality, while the Minolta and Olympus images leaned toward a magenta colorcast.

In our flash test, the Minolta, Nikon,

### »»The Scores Here's how our prosumer cameras fared in our ratings.

PROSUMER	Image Quality					Camera Handling					
	Price \$	Exposure Balancing	Color Accuracy	Quality & Detail	Focus	Flash	Performance	Usability	Battery Life	Score %	Rank
Nikon Coolpix 5400	799.95	10	9	9	10	8	8	10	9	91.5	1
Canon PowerShot G5	799.99	9	9	8	10	8	9	10	10	90.5	2
Sony Mavica CD500	699.00	10	10	9	10	9	6	7	9	88.0	3
Olympus C-5050	799.00	9	9	8	10	9	8	8	9	87.5	4
Minolta DiMAGE 7Hi	1,299.00	9	9	7	7	10	9	9	7	84.0	5
Test weighting		15%	15%	15%	15%	10%	15%	10%	5%		

\* Ratings on a scale from 1 to 10, 10 being the highest.



# PROSUMER [Compare & Contrast]

## Nikon Coolpix 5400

**PERKS** Beautiful, sharp, evenly balanced exposures. Cleanest and most detailed images. Great color. Most comfortable camera to grip. Smallest and lightest. Time-lapse capability. Useful swivel-out LCD.

**QUIRKS** Flash is one of the weakest. Slow write times. Included 16MB card holds only one full-resolution TIFF file.



Great exposures, and sharp, clean images.

## Canon PowerShot G5

**PERKS** Beautiful, sharp images. Evenly balanced exposures. Best macro capability. Good image buffer—no waiting. Excellent focusing. Great swivel-out LCD.

**QUIRKS** Noise in low-light images. Flash images display a yellow colorcast. Tends to display image softness in highlights and lighter colors.



Beautiful, sharp images with great color, but some noise in the shadows.

## Sony Mavica CD500

**PERKS** Gorgeous images with the most accurate color of all. Writes images onto 3-inch CD-R/CD-RW media—much cheaper than any other storage-media format.

**QUIRKS** Some noise. Insanely long TIFF write times (over a minute per image). Big. PCs can read data off CDs, but Mac users have to download images via USB.



Gorgeous, detailed exposures, and accurate color.

## Olympus C-5050

**PERKS** Great images and detail. Good color. Solid, small, and feature-packed. Supports a variety of media cards. Felt good in our hands. Features a tilt-out LCD. Quick auto focusing.

**QUIRKS** Noisy images. Slow write times. Somewhat confusing menu navigation with lots of button, dial, and menu combinations to conquer.



Great exposure and detail, but noisy images.

## Minolta DiIMAGE 7Hi

**PERKS** Best flash. Well-balanced images in even lighting. SLR-like body with 7x optical zoom and focus rings on the lens. Controls on the body means not having to slog through menus. Feels indestructible.

**QUIRKS** Some noise. Weak macro. Short battery life. Can't get any closer than 15 inches in macro mode (manufacturer's claim is 9.8).



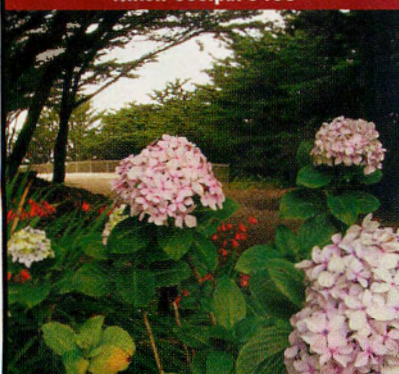
Nice exposures, but some noise and focusing problems.



PROSUMER

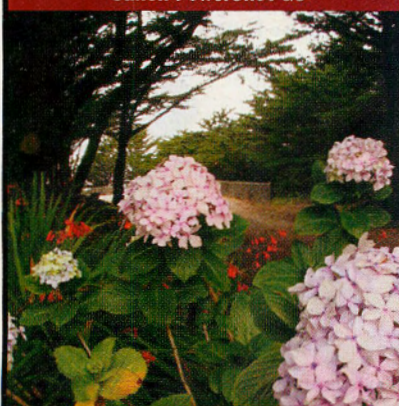
## [Exposure Balance]

### Nikon Coolpix 5400



The Nikon produced consistently even exposures with no noticeable unwanted purple pixel problems—even with this backlit scene.

### Canon PowerShot G5



Though their exposures were balanced, images from all cameras other than the Nikon—including this one from the Canon PowerShot G5—displayed not-so-angelic halos and purple fringing in the trees.

» **Camera Handling** We like the Nikon's small size and easy menu navigation best, and we can easily grip the camera with one hand. However, its slow write times and weak flash caused us some concern. The Canon has the best-quality LCD screen, and we like not having to wait for images to write to media. We like the solidness of the Minolta, along with its lens-based zoom and focus ring controls; unfortunately, we had some difficulties with its auto focusing, and its rabid battery consumption forced us to use the Olympus's batteries as a bailout.

Although we like all the bells and whistles the Olympus offers, along with its superb gripability, the camera's multilevel menu navigation is confusing. We found ourselves constantly trying to remember how to access controls, and missed a lot of shooting opportunities in the interim. The Sony was the biggest of the bunch, but its incredibly slow TIFF-writing times got so bad that we started shooting JPEGs instead, just because of their much faster writing times (yeah, we broke our own rule that we'd only shoot TIFFs, but the fog was looming, and we didn't have a choice).

» **Overall** We'd buy the Nikon Coolpix 5400 and Canon PowerShot G5. If we were retired and thus had the time to wait for images to finish writing, we'd buy the Sony Mavica CD500. We'd be happy with the Olympus C-5050 and Minolta DiMAGE 7Hi.

# Get Serious—Get an SLR

If you're a skilled photographer or you've decided to get serious about taking your photography beyond the point-and-shoot and prosumer realms, digital SLRs allow you to get far more creative with your image composition and exposure. Most of these cameras ship as bodies only, allowing you to interchange different lenses to meet your needs. If you already have lenses for a film camera and want to go digital, check with your lens manufacturer to find out if the lenses you have are compatible with any digital SLR; if they're not—or if you're a first-time SLR buyer—expect to shell out a chunk of change for a couple of lenses.

In this category, we looked at the 6.3-megapixel **Canon EOS-10D** (\$1,999, [www.usa.canon.com](http://www.usa.canon.com)), the 6.11-megapixel **Nikon D100** (\$1,999, [www.nikonusa.com](http://www.nikonusa.com)), and the 5-megapixel **Olympus E-1** (\$2,199, [www.olympus.com](http://www.olympus.com)). Prices are for the bodies only.

These cameras give you full aperture and shutter-speed control for the attached lens, and a greater range of ISO, exposure compensation, white balance, flash control, and bracketing settings. Plus, they come tricked out with in-camera tweaking controls up the wazoo—in Wazooian, that means features like RAW data editing, ISO boost, tone and hue controls, Bulb exposure settings, selectable color space, and more. They also house much

## The A-list

PROSUMER

» **First** Nikon Coolpix 5400. With excellently balanced exposures, clean images, and good portability, the 5400 wins. It also gave us consistency in both image quality and handling.

» **Second** Canon PowerShot G5. The G5 comes close, but its tendency toward highlight softness along with its off-color flash is enough to notch it down.

» **Third** Sony Mavica CD500. Truth be told, the CD500 could have won this whole thing flat out if it weren't for its ridiculously slow TIFF write speeds and download times. It produces the best images—even its JPEGs were great. Unfortunately, shooting TIFFs became such a drag that we couldn't wait to abandon the effort.



# THE SLR COMPETITORS

## Olympus E-1

PRICE \$2,199 (body)  
WEBSITE [www.olympus.com](http://www.olympus.com)  
RESOLUTION 5 megapixels



## Nikon D100

PRICE \$1,999 (body)  
WEBSITE [www.nikonusa.com](http://www.nikonusa.com)  
RESOLUTION 6.11 megapixels



## Canon EOS-10D

PRICE \$1,999 (body)  
WEBSITE [www.usa.canon.com](http://www.usa.canon.com)  
RESOLUTION 6.3 megapixels

bigger CCD chips (or CMOS, in the case of the Canon EOS-10D) than the less-expensive cameras, allowing them to capture more image information.

All of these cameras handled varying degrees of light well and balanced tricky lighting situations a lot better than the point-and-shoots and prosumer cameras, producing good image detail and color. The viewfinders on these cameras were superb, allowing us to see our compositions a lot more clearly than standard digicams. We like the Olympus's handling and control-access the best, though its images have a squarer aspect ratio than the other digital SLRs, which have aspect ratios that mimic the more-rectangular aspect ratios of film-based SLRs. The Canon produced the cleanest images overall—though, we hasten to note, we were shooting with a preproduction Olympus. We did

### Olympus E-1



The Olympus consistently churned out nicely exposed images with hardly any evidence of blooming or chromatic-aberration problems.

see a few minor *chromatic aberrations* (colored fringes that appear because a lens refracts different-colored light at different angles) from all three cameras, but there were fewer in the Olympus.

So which to buy? If starting from scratch, we would choose the Olympus for its handling—but really it comes down to which lenses you already own. The Canon was solid all around and offered excellent focus. The Nikon's color was a bit more muted than the other two, but handled exposure well. Frankly, we can recommend all three—there isn't a sour one in this bunch.



MacAddict editor and resident photography expert Kris Fong suffered through one scraped knee, two bug bites, one ousting by a security guard, a near-crapping by a seagull with serious intestinal distress, and countless inquisitive tourists—all for the sake of science, art, and you.

### Canon EOS-10D



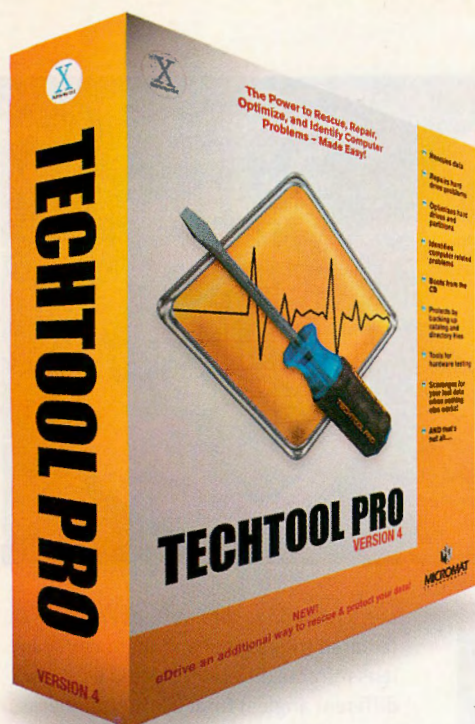
Manual controls allow you to control light intensity and select the in-focus areas in your composition, as seen in this shot from the Canon EOS-10D.

### Nikon D100



Setting a large aperture allowed us to focus the Nikon D100 on this snail and blur out the little guy's backdrop.





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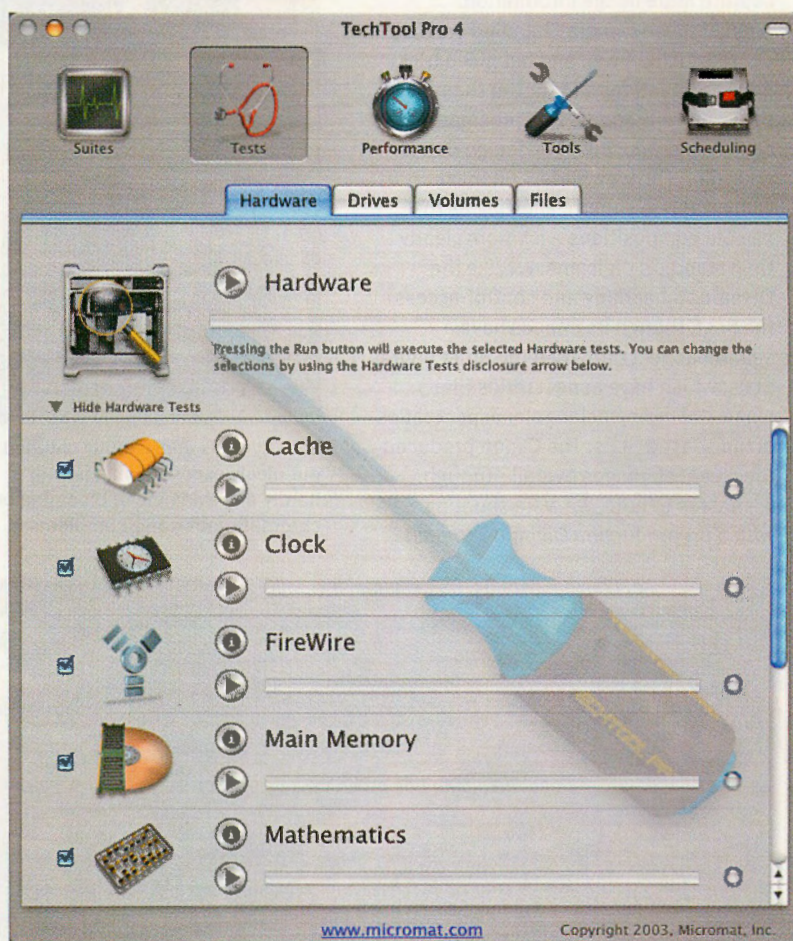
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The Ultimate **MacAddict**

# HOLIDAY



# GADGETS

## GUIDE

**N**eed gift ideas for a gadget nut? We've got you covered. Here's a glimpse at the newest, coolest, shiniest stuff—both cheap and not-so-cheap—for the videographer, music lover, mobile maniac, or Mac addict in your life.

by Cathy Lu with photography by Mark Madeo





1. Harman Multimedia JBL Duet
2. HP scanjet 4670
3. Microsoft Wireless IntelliMouse Explorer
4. Lexar Media JumpDrive Secure
5. Belkin Bluetooth Wireless Optical Mouse
6. LaCie Mobile Hard Drive

**Lexar Media  
JumpDrive Secure**  
\$99.99,

[www.lexarmedia.com](http://www.lexarmedia.com)  
Receivers of this small and  
utilitarian USB 1.1 Flash drive get 256MB  
of storage plus software that secures  
their files (see *Reviews*, Nov/03, p60).

**Harman Multimedia JBL Duet**  
\$59.95, [www.harman-multimedia.com](http://www.harman-multimedia.com)  
This two-speaker set comes in white or  
silver. The speakers are curvy and sleek.  
Yeah, we're all about looks.

**HP scanjet 4670**  
\$199.99, [www.hp.com](http://www.hp.com)  
We rarely think a scanner is sexy, but  
when it's translucent, stands vertically  
and opens from the top, we almost don't  
mind the time commitment involved in  
scanning, archiving, and retouching all of  
our old childhood pictures.

**Victorinox CyberTool 29** →  
\$60, [www.swissarmy.com](http://www.swissarmy.com)  
From the makers of  
the Swiss Army Knife,  
the CyberTool is a  
Mac tinkerer's dream,  
complete with 13 different screwdriver  
bits, a bit holder, a wire stripper, a pen,  
and—for celebrating after a successful  
hardware hack—a corkscrew.



## For the Mac Addict

**LaCie Mobile Hard Drive**  
\$349, [www.lacie.com](http://www.lacie.com)  
At 80GB (20GB and 40GB models also  
available), this eensy drive designed  
by F. A. Porsche is a great place to  
back up files or store MP3s. It looks  
cool too.

**Microsoft Wireless  
IntelliMouse Explorer**  
\$64.95, <http://microsoft.com/hardware>  
The newest version of our favorite  
Microsoft mouse features a scroll  
wheel that also tilts from side to  
side for horizontal scrolling—great  
for people who spend their days  
immersed in spreadsheets, Mac OS  
X's column view, and really wide Web  
sites. Strangely, horizontal scrolling  
didn't work for us in all apps  
(for example, InDesign and—  
surprisingly—Word).

**Belkin Bluetooth Wireless  
Optical Mouse**  
\$79.99, [www.belkin.com](http://www.belkin.com)  
If your gift recipient  
is on the Bluetooth  
bandwagon, simplify  
his or her desk space  
with this wireless  
mouse. With three  
buttons and a  
clickable scroll wheel,  
it handily outclicks  
Apple's new wireless mouse.



**iSkin ProTouch**  
\$35.99, [www.iskinprotect.com](http://www.iskinprotect.com)  
For anyone who eats Ritz Bits and  
other crumbly snacks over their Apple  
keyboard, get them this silicone  
keyboard bib. It comes in nine colors.  
Steve Wozniak uses the PowerBook  
version, so it must be cool!

**Panther**  
\$129, [www.apple.com](http://www.apple.com)  
Many Mac loyalists feel bitter about  
having to shell out another \$129 after  
buying Jaguar last year. Alleviate their  
anger by buying Panther for them.

## SPLURGE

**Apple Dual 2GHz Power Mac G5**  
\$2,999, [www.apple.com](http://www.apple.com)  
Believe us: No Mac addict will hate you  
for giving them this gift. The question is:  
Will you hate yourself when you see your  
credit card bill next month?

## SCROOGE

**Radio Shack Multicolor Wire Wraps**  
\$2.99, [www.radioshack.com](http://www.radioshack.com)  
Who doesn't have a cable-management  
nightmare on their hands? These ties  
can help you get things under control.



# For the Budding Videographer

## Sony DCR-PC105 MiniDV Handycam Camcorder

\$999.99, [www.sonystyle.com](http://www.sonystyle.com)  
This 16-ounce camcorder includes a 1-megapixel camera, Carl Zeiss (aka high-quality) optics, and a pop-up flash for still images. It also includes a 2.5-inch swivel screen, 10x optical zoom, and even a carrying case.



## Final Cut Express

\$299, [www.apple.com](http://www.apple.com)

If your video-editing loved one is frustrated by iMovie's limitations, upgrade him or her to this almost-Final-Cut-Pro-quality package.

## Contour Design ShuttlePro V.2

\$129.95, [www.contourdesign.com](http://www.contourdesign.com)

This mouse (of sorts) is custom-designed for working in multimedia apps like Final Cut Express and iMovie. It's got 15 programmable buttons and a jog/shuttle knob for scrubbing through frames.

## LaCie Big Disk USB 2.0 & FireWire 800

\$799, [www.lacie.com](http://www.lacie.com)

This 500GB external drive has two 250GB 3.5-inch drives—enough to hold two full days of raw digital video. It spins at 7,200 rpm and streams DV at FireWire 800 speeds—great for your video-obsessed pal. (Penny-pinching tip: Get a 400GB drive and save \$150.)

## EZQuest Boa Slim DVD-RW/CD-RW

\$359, [www.ezq.com](http://www.ezq.com)

If you're buying for a SuperDrive-less Mac owner, consider this superthin, cute drive. Buy it for the form factor, not the DVD authoring software, which works but isn't great (see "The Great DVD Debate," p41). If your giftee is into creating beautiful DVDs—and you're into the giftee—splurge on a copy of Apple's DVD Studio Pro 2 for \$499 (see our review on p58).



## Apple 20-inch Cinema Display

\$1,299, [www.apple.com](http://www.apple.com)

How much do you love the person you're buying for? If the answer is "very, very much," then consider this beautiful LCD. Anyone who does video editing (actually, anyone in general) will love it—and love you for giving it to them.

## SPLURGE

### Sony DCR-PC330 MiniDV Handycam Camcorder

\$1,699.99, [www.sonystyle.com](http://www.sonystyle.com)

This miniDV camcorder out-classes the Sony DCR-PC105 (above). One reason: a 3.31-megapixel CCD for better stills.

### ADS Pyro DV Drive

\$699, [www.adstech.com](http://www.adstech.com)

Your video buddies will save time and tapes when they encode DV video directly from their camera to this 30GB drive. They'll look like pros as well—a leather belt pouch is included.

## SCROOGE

### Leland PowerClean Ultra Micro Fiber Cloth

\$7.95, [www.bhphotovideo.com](http://www.bhphotovideo.com)

There was a time when lens dust made home videos look charming. Not anymore. Every videographer needs a good cleaning cloth.

### Bogen 728B Digi Tripod

\$113, [www.bhphotovideo.com](http://www.bhphotovideo.com)

People who don't have steady hands (aka most of us) need tripods. This one includes a three-way head for pan and tilt, and a carrying case.

### GeeThree Slick Volume 6

\$74.95 for CD, [www.geethree.com](http://www.geethree.com)

Controlled color correction no longer has to belong solely to the Final Cutters of the world. The Slick Volume 6 iMovie plug-in pack adds a way-better color corrector, the ability to create a video montage, and other cool effects.



1. Contour Design ShuttlePro V.2
2. Apple 20-inch Cinema Display
3. LaCie Big Disk USB 2.0 & FireWire 800
4. Sony DCR-PC105 MiniDV Handycam Camcorder
5. ADS Pyro DV Drive
6. EZQuest Boa Slim DVD-RW/CD-RW





1. Canon Card Photo Printer
2. Kensington FlyLight Titanium
3. Griffin iCurve
4. Iogear Memory Mini Mouse
5. Sony Personal Travel Speakers
6. Palm Tungsten T3

to carry—great for those laptop owners who are always getting banished to the farthest airport gate possible.

#### Kensington FlyLight Platinum

\$22.95, [www.kensington.com](http://www.kensington.com)

What every PowerBook user needs: a little light that shines on their keys for typing in the dark.

#### DataViz Documents to Go Standard Edition

\$49.95, [www.dataviz.com](http://www.dataviz.com)

Documents to Go lets Palm

users view and work in Excel and

Word documents on their handhelds—a

must for Palm addicts who travel and

do lots of work on their PDAs. Get

the Premium Edition (\$69.95) if your

recipient also works in PowerPoint.

#### Palm Wireless Keyboard

\$69.95, [www.palm.com](http://www.palm.com)

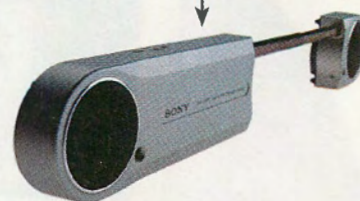
For Palm PDA owners, this wireless keyboard that works via the Palm's IR port is the way to type.

#### Sony Personal Travel Speakers

SRS-T100PC

\$99.99, [www.sonystyle.com](http://www.sonystyle.com)

So cute! These fold-up speakers are a great gift for those who own a laptop, do a lot of traveling, and are particular about sound. Plug 'em right into your Mac's USB port.



#### Palm 1.3 Megapixel Camera

\$99.95, [www.palm.com](http://www.palm.com)

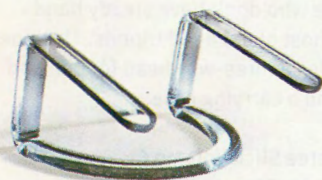
This 1.3 megapixel camera slips into Palm Tungsten models' SD slot and can take all sorts of candid—or, if you want, illicit—pictures.

## For the Truly Mobile

#### Canon Card Photo Printer CP-300

\$379, [www.canon.com](http://www.canon.com)

This tiny dye-sublimation printer outputs great-looking 4-by-6-inch postcards—complete with postcard markings on the back (see *Reviews*, Nov/03, p59).



#### Griffin iCurve

\$39.99, [www.griffintech.com](http://www.griffintech.com)

Sure, it's just a clear plastic stand—but it's an ergonomic godsend for those who work on a PowerBook or iBook at their desks. It raises the display to eye level, tilts the keyboard, and keeps your 'Book both running and looking cooler.

#### Iogear Memory Mini Mouse

\$49.95, [www.iogear.com](http://www.iogear.com)

This tiny portable mouse for laptop users comes complete with a handy retractable cord and 32MB of Flash memory for storing a few files.



#### Palm Tungsten T3

\$399, [www.palm.com](http://www.palm.com)

It's got the biggest screen of any PDA (320 by 480 pixels), and you can view in either portrait or landscape mode. Plus, it slides closed so that it can fit in, well, your palm. A PDA-phile's dream.

#### Case Logic Large Neoprene Computer Case

\$34.99, [www.casellogic.com](http://www.casellogic.com)

This lightweight laptop case is a joy

### SPLURGE

#### La-Z-Boy Delta Recliner

\$1,500 (ESP), [www.lazboy.com](http://www.lazboy.com)

Your mobile loved one really needs a place to relax. This recliner comes in leather and has built-in massage and power-recline features.

### SCROOGE

#### Kensington Portable Ethernet Cord

\$22.95, [www.kensington.com](http://www.kensington.com)

Every laptop-carrying business traveler needs a cool-looking retractable Ethernet cable.



# For the Music Lover

## Griffin Technology RadioShark

\$69.99, [www.griffintechology.com](http://www.griffintechology.com)

The RadioShark plugs into a USB port; adds a software-controlled AM-FM radio to your Mac; can record any AM, FM, or Internet radio-broadcast audio, TiVo-style; and gives you a good excuse to buy that external FireWire drive you've been eyeing.



and feeds it juice when the regular battery runs out.

## Griffin Technology iTrip

\$35, [www.griffintechology.com](http://www.griffintechology.com)

If you know peeps with iPods, get them this cool FM transmitter, which allows them to listen to iPod music via any free FM radio frequency. Two models are available: one for dockable 'Pods, and one for older models.



## Belkin Mobile Cassette Adapter

\$24.99, [www.belkin.com](http://www.belkin.com)

This doohickey slips into a car cassette player and plays tunes from connected portable music devices, including, yes, an iPod.

## SPLURGE

### New Volkswagen Beetle

\$15,950 and up, [www.vw.com](http://www.vw.com)

Even though the "Buy a New Beetle, get a free iPod" promotion is over, we still like the idea. Throw in an iTrip or Belkin cassette adapter for listening to iPod tunes in the car.

## SCROOGE

### Journey's "Lovin' Touchin' Squeezin'"

\$0.99, iTunes Music Store, [www.apple.com](http://www.apple.com)

A song is worth a thousand words. Wait, that's a picture. Well, anyway, there's nothing that says, "I care" like a heartbreaking Journey song.

## Dr. Bott naviPod

\$49.95, [www.drbott.com](http://www.drbott.com)

This sweet little wireless remote for the iPod (there are versions for both new and old 'Pods) lets users control their music player from up to 25 feet away (see *Reviews*, Nov/03, p61).



MacAddict editor Cathy Lu thinks Christmas should last 365 days of the year. Just the eggnog and gift-receiving parts, though.

## Rio Cali

\$199.99, [www.rioaudio.com](http://www.rioaudio.com)

Believe it or not, not everyone wants an iPod. Runners and other athletic types may prefer less bulk and more durability. The Rio Cali comes with 256MB of onboard memory (a 128MB version is also available but holds only 30 songs), is encased in protective rubber, includes an FM tuner and stopwatch, and can strap onto your arm.

## Sony 900MHz RF Wireless Speaker System SRS-RF90RK

\$179.99, [www.sonystyle.com](http://www.sonystyle.com)

This wireless beauty could sound pretty bad and we'd still think it was cool—and useful for listening to music fed to it from an iPod or Mac in the next room. Watch out—there may be interference from other wireless devices.

## Sony Noise Canceling Headphones MDR-NC20

\$179.99,

[www.sonystyle.com](http://www.sonystyle.com)

For some, the iPod earbuds just don't cut it. Treat your favorite audiophile to these fine headphones, which reduce outside noise by more than 70 percent.

## LaCie FireWire CD-RW

\$99, [www.lacie.com](http://www.lacie.com)

Frankly, a SuperDrive's 16X and a Combo Drive's 32X CD-R burn speeds aren't fast enough for avid CD-burning music lovers. Get them a faster drive. This one's designed by F. A. Porsche, is affordable, and burns CD-Rs at 52X and CD-RWs at 32X.

## Belkin Backup Battery Pack for iPod

\$69.99, [www.belkin.com](http://www.belkin.com)

The battery on one of those new dock-connecting iPods just ain't gonna last all the way from San Francisco to Seoul. This battery pack attaches with suction cups onto the back of your iPod

1. LaCie FireWire CD-RW 2. Sony 900MHz RF Wireless Speaker System 3. Dr. Bott naviPod 4. Griffin Technology iTrip 5. Belkin Backup Battery Pack for iPod 6. Griffin Technology RadioShark 7. Rio Cali

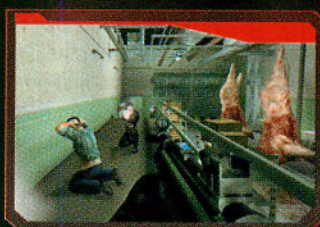




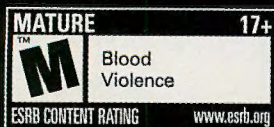
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# THE GREAT DVD DEBATE

by Helmut Kobler  
photography by Mark Madeo

**B**urning your own DVDs is the only way to go when you want to package your video projects in style. Even the most pedestrian videos and photo albums can feel sexy when they're wrapped in slick, polished menus and animated buttons. And if you want to share your work with other people, you'll feel just as sexy when you hand out a sleek, shiny DVD instead of some old-school VHS tape (VHS?!...blech!).

If you're rarin' to get in on the DVD love fest, you have two options: Buy a shiny new Mac with a built-in SuperDrive, or pick up an external drive that connects to your Mac via FireWire. In most cases, these drives—Apple's or others'—perform similarly: They burn DVD discs at 4X speed, taking 15 to 20 minutes to record a full disc. What sets the drives apart is the authoring software each includes—that is, the app you use to create your disc's menus and buttons, and encode your video into MPEG-2, which is the format DVDs demand.

No SuperDrive? *¡No problema!* Here's how the latest onslaught of DVD drives and their bundled authoring software stack up against Apple's SuperDrive and iDVD.





## Apple SuperDrive

Apple's iDVD makes the other DVD-authoring apps reviewed here look like candidates for amateur hour.

Part of iDVD's allure is that it's laughably easy to use but at the same time offers tons of control over your DVD's design. One of its most impressive features is *motion menus*—menus that use a video clip as a backdrop for your interface instead of just a static image. You can also make buttons from video clips, so the buttons animate like they do in big-budget Hollywood DVDs.

You can build multiple, layered menus, in which your main menu can contain buttons that lead directly to movie clips while other buttons bring you to additional menus. You can create your own menu designs, or modify one of iDVD's *themes*—professionally designed groups of menu elements. Apple provides themes for weddings, vacation videos, baby births, sports, and pretty much any occasion you can think of.

Not surprisingly, iDVD works well with Apple's other iApps. By clicking a single button in iMovie, for example, you can instantly import a video you've edited in iMovie into iDVD.

What's more, iMovie chapter markers automatically convert into iDVD chapter buttons. You can easily add background music tracks from your iTunes library

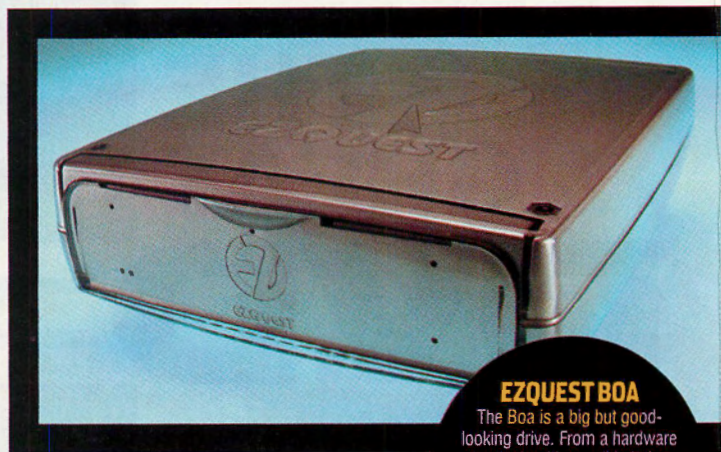
### APPLE SUPERDRIVE

To add some wow to your DVDs, the iDVD/SuperDrive combo is by far your best choice—that is, if you're willing to spring for a new Mac (G5, anyone?) or take your chances on upgrading your internal drive.

Ships with most Macs  
www.apple.com  
Software: iDVD 3



iDVD comes with a number of templates, but you can also design your own from scratch.



### EZQUEST BOA

The Boa is a big but good-looking drive. From a hardware standpoint, it's a solid choice; from an authoring perspective, its ImageMixer software left us feeling so-so.

\$299, www.ezq.com  
Software:  
ImageMixer 1.3.2

(or add an entire playlist) to your DVD, and there's a convenient slide-show feature that lets iDVD import photo albums from iPhoto.

The only real hitch is that iDVD works only with an internal SuperDrive—this is Apple's way of encouraging you to buy a new SuperDrive-equipped Mac. Some users (including ourselves) have had success with buying and installing internal drives that use the SuperDrive mechanism, such as the Pioneer DVR-105 (OWC, www.macsales.com, \$179.99). However, there's no guarantee it will work for you—or work well. The best solution is to buy a new Mac with a SuperDrive installed. If you don't have the money to buy a new Mac, read on for other options.

## EZQuest Boa FireWire

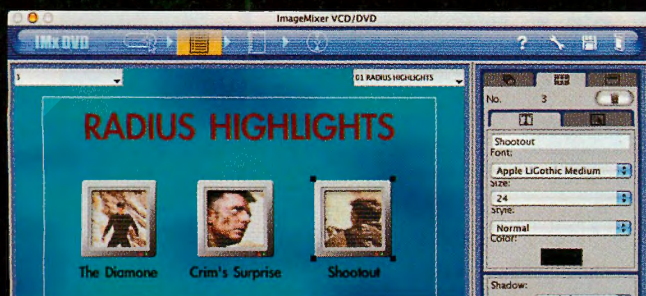
If you like your hardware jumbo-sized, you'll dig the EZQuest Boa. At 10.75 by 8.5 by 2.75 inches, it's the biggest drive in our crop—not so good if you want to keep your desk clear. On the other hand, you can comfortably stack other devices or whatever else on the EZQuest's broad, flat top. Also, its subtle curves and sleek gray color scheme make a nice match for any Power Mac G4 (yes, some of us still use G4s). EZQuest also offers a much smaller DVD drive, the Boa Slim, with the same software, but you pay \$60 more for its compact convenience (see "The Ultimate Gadgets Guide," p35).

The bigger problem for the EZQuest is its authoring software, ImageMixer. For starters, it only lets you drag folders full of movies to your menus, not individual movies—you need to place each movie in its own folder to get around this annoying limitation.

Second, when you add a movie folder to your menu, ImageMixer creates a thumbnail button that shows the movie's first frame, but you can't change that frame—if a movie fades up from black, you'll get a black thumbnail. You also can't resize those thumbnail buttons, or drag them to new positions on your menus. While you can use any still picture as a menu background, there's no motion-menu option. Plus, you can't vary the quality level used to encode your video (you get 60 minutes of video per disc). On top of it all, the software is such a CPU hog that it uses up to 50 percent of your Mac's horsepower even while running idle in the background.

The news about ImageMixer isn't all bad. For example, the software lets you create nested menus; provides lots of





ImageMixer positions movie thumbnail buttons automatically, and there's no way to customize their layout. Also, each thumbnail can only show the first frame of its video clip—you can't pick a frame.

pre-designed background and button frame artwork (identical to that in LaCie's CaptyDVD software, as both apps come from the same developer); lets you add looping audio clips to menus; and has a decent slide-show mode.

### Formac Devideon Superdrive DVD+/-RW

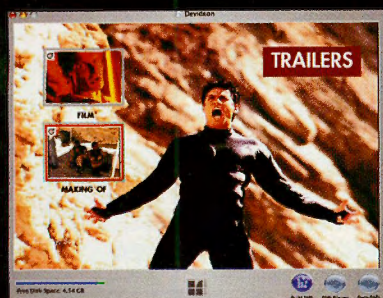
The Devideon's curvy, all-white case is, shall we say, an interesting exercise in funky industrial design. On the plus side, its white plastic matches the look of newish iBooks, eMacs, and iMacs. On the flip side, this drive has one of the biggest footprints of our test crop, and all its curves make it a bit too sci-fi kitschy for our simple, country tastes. The curves also make it hard to stack other gear, such as hard drives, on top.

The drive ships with Devideon 2.5, a DVD-authoring app that's easy to use but limited. Start your authoring adventures by setting a background for your main menu—simply drag in any still image,

#### FORMAC DEVIDEON

The Devideon drive's look is idiosyncratic, but that may be just what you want. It's authoring software works for quick-and-dirty DVDs, but for anything more refined, you'll have to look elsewhere.

\$329, [www.formac.com](http://www.formac.com)  
Software: Devideon

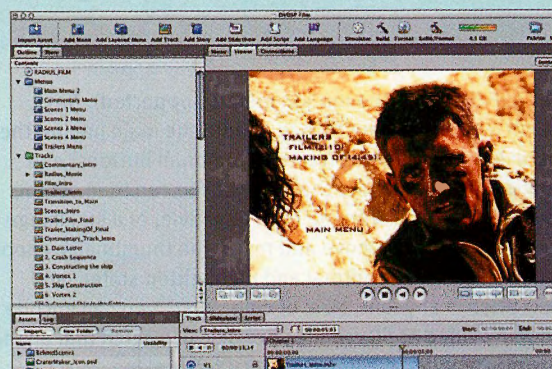


The Devideon authoring app is strong on layout features but falls short when it comes to other frills, such as multiple menus and background audio.

## Authoring Alternatives

**DVD Studio Pro 2** (\$499, [www.apple.com](http://www.apple.com))

If you want slick, feature-rich DVDs but can't run iDVD 3, then consider DVD Studio Pro 2—it works with all third-party burners, not just Apple's SuperDrive (see our review on p58). It offers an option for a scaled-down interface that's almost as easy to use as iDVD's, and features tons of professionally designed templates. Plus, as your needs grow, DVD Studio Pro can accommodate. For example, you can play movies in any order (such as an intro video before a menu); define remote-control functionality; and set up subtitles, multiple audio tracks (think director's commentary), and multiple video angles. DVD Studio Pro is capable of advanced scripting, allowing you to, say, display a different subtitle track depending on the language viewers select.



You can run DVD Studio Pro 2 with an easy, iDVD-like interface, or slip into power-user mode as seen here.

**Toast 6 Titanium** (\$99.95, [www.roxio.com](http://www.roxio.com))

Roxio's latest, Toast 6 Titanium, can author DVDs. You can drag QuickTime videos (for example, DV clips from iMovie) to Toast, encode them at Standard or High quality settings, automatically generate a menu that lets you choose a thumbnail frame from each video as a button, and type in text titles. You can also create slide shows of still pics, and set the amount of time the slides are displayed. Unfortunately, you can't choose a menu's background art or button styles, and you can't add audio to menus. It does offer some handy features, though, such as the ability to dump an entire DV tape straight from your camera to DVD.



Just drag your video files to this window, click the red button, and Toast 6 does all the rest.



# FAST FACTS

## COMPATIBILITY

Beware: The video DVDs you burn with these drives won't play in all consumer DVD players—more like 85 to 97 percent of those currently on the market. On the bright side, your burned DVDs will play in any computer DVD-ROM drive, so if someone can't get your discs to work, tell them to boot it up on their Mac (OK, OK—or their PC).

## STORAGE SPACE

The drives reviewed here burn discs known in tech circles as DVD-5s, which can store 4.7GB of data. Sure, that sounds like a lot, but it's only about half of the data stuffed onto commercial, Hollywood DVDs (called DVD-9s). So count on storing just a single hour of top-quality video on your DVDs. If you need more space, you can encode media at a lower quality in most authoring apps.

## DVD-R VS. DVD+R

There are two families of recordable DVD media: DVD-R and DVD+R. What's the difference? Practically speaking, not a whole lot: Both discs store the same amount of data, but DVD-R discs tend to play on more consumer DVD players. Either way, most of the drives reviewed here now burn both. Apple, however, only supports DVD-R—unless you own Panther, which (for now) supports DVD+R in backup but not in iDVD.

such as a JPEG or TIFF (no motion menus supported). Next, drag each movie you want to include into the main menu—the Divideo software creates framed thumbnail buttons, and automatically links them to the movies. You can then set the thumbnails to show any frame from its movie, or a still image of your choice. You can move and resize the thumbnails, choose the frame color in both normal and highlighted states, and add text titles in any font, size, or color. Also, you can encode high-quality video at 60 minutes per disc or stretch that all the way up to two hours at a lower-quality setting.

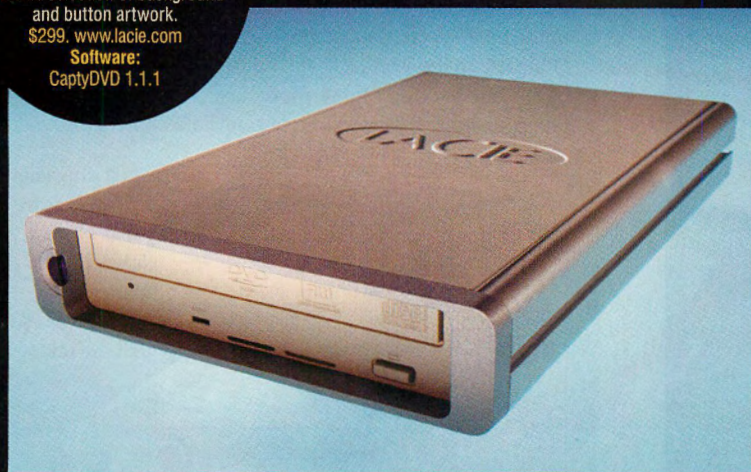
But that's about as fancy as things get. The software doesn't include ready-made backgrounds and buttons, so you have to design your DVD's look and feel all by your lonesome. Plus, you can't add audio clips to a menu, so viewers will be greeted with the sound of silence. There's also no way to create layered menus (a main menu with submenus), and there's no slide-show option.

### LACIE D2

CaptDVD offers lots of features—we only wish there were more features to add polish to your disc designs, such as motion menus, motion buttons, and a better selection of background and button artwork.

\$299. [www.lacie.com](http://www.lacie.com)

Software:  
CaptDVD 1.1.1

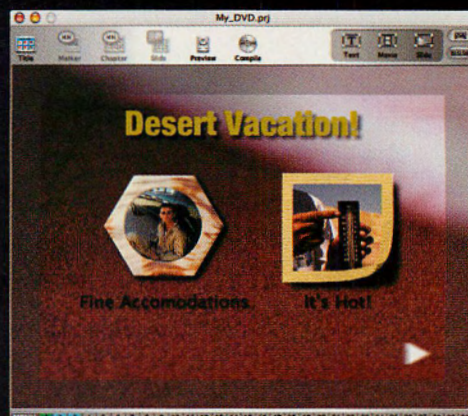


## LaCie D2 DVD+/-RW

LaCie's latest version of its d2 DVD+/-RW drive is a solid performer. Its long, narrow metal case emphasizes *industrial* over *design*—not that it's ugly, it's just plain-vanilla solid. As for authoring, the d2 drives come with CaptDVD software, which is second only to iDVD—a distant second, but second nonetheless.

Since CaptDVD's interface isn't amazingly intuitive, you may need to skim the manual. However, once you have your bearings, building a disc is straightforward. You can build a static menu background using your own still images or choose from several included background images, such as sand, water, handmade paper, stone carvings, and plush fabric (though nothing matches iDVD's artwork).

To import movies, just drag them from the Finder to the menu you're creating inside the CaptDVD window. A static thumbnail will appear in that menu with the first frame of the movie as the button—after that thumbnail is created, you



Some of CaptDVD's button frames and menu backgrounds are a little cheesy.



can choose a movie frame to represent it. You can choose a border for the button as well, but you get the same cheesy choices as you get in the ImageMixer software that other drives bundle. LaCie promises that CaptyDVD 2.0, which it will release in the near future, will have improved graphics. Let's hope so.

You can rearrange your buttons onscreen, add menu and button text titles, control text shadows, add looping music clips to menus, and create multiple menus that use forward and back buttons for navigation. You can't, however, create a button thumbnail that leads to its own menu, as you can in iDVD. And while you can set markers in videos and create unique thumbnails for each marker, such as in a commercial DVD's Scenes menu, you can't import markers from other video apps like iMovie. CaptyDVD also lets you encode video at three quality levels (for one to two hours of video) and generate a slide-show presentation of still pics.

### MCE Desktop Series

MCE's understated, handsome gray case and its small desktop footprint make it our favorite external drive. Too bad its ImageMixer authoring software isn't as attractive.

Like EZQuest, MCE ships its drive with ImageMixer, which is one of the more barebones apps we tested. ImageMixer offers basic authoring functionality, but it lacks custom layout and video encoding options, and is marred by some other quirks. Check out ImageMixer's features—and lack of them—in our description of the EZQuest Boa FireWire, p42. ■

#### MCE DESKTOP

MCE's DVD burner comes in a great case, but its ImageMixer software keeps it from being useful for anything but barebones DVDs.

\$249, [www.mctech.com](http://www.mctech.com)

Software:  
ImageMixer 1.3.2



ImageMixer's capabilities are limited, and its interface screams "PC port!"



Helmut Kobler is a digital filmmaker and *MacAddict* contributing editor about to undergo a life-altering shift: He's trading in his PowerBook for a Dual 2GHz Power Mac G5...and he ain't lookin' back.

## AND THE WINNER IS....

If building beautiful, full-featured DVDs makes you giddy, you have three options.

1. Spring for a new **Mac with SuperDrive** (which will get you a free copy of **iDVD**).
2. Buy a third-party burner—we like the **MCE Desktop Series** for its style and compact size—along with a \$499 copy of **DVD Studio Pro 2** (see "Authoring Alternatives," p43)
3. If you can't justify paying for DVD Studio Pro, pick up a **LaCie d2 DVD+/-RW**. It's a solid drive, and its **CaptyDVD** software is respectable, if not awe-inspiring.

### SOFTWARE SIDE BY SIDE Here are the main features each DVD authoring app does—and doesn't—include.

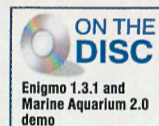
Software Package	CaptyDVD 1.1.1	Devidoon 2.5	DVD Studio Pro 2	iDVD 3	ImageMixer 1.3.2	Toast 6 Titanium
Software ships with	LaCie d2	Formac Devidoon Superdrive	Buy as standalone software*	Apple SuperDrive	MCE Desktop Series and EZQuest Boa	Buy as standalone software**
Predesigned template and button styles	●		●	●	●	●
Multiple menus	●		●	●	●	●
Customizable buttons	●	●	●	●	●	●
Ability to choose any video frame for a button	●	●	●	●	●	●
Customizable menu backgrounds	●	●	●	●	●	●
Motion menus and buttons			●	●		
Support for audio	●		●	●	●	
Support for slide shows	●		●	●	●	●
Ability to rearrange buttons on menus	●	●	●	●		
Multiple encoding settings	●	●	●	●		●

\*\$499, [www.apple.com](http://www.apple.com) \*\*\$99.95, [www.roxio.com](http://www.roxio.com)



# Stocking Stuffers

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## Games and Entertainment

### PANGAEA SOFTWARE ENIGMO

\$19.99, [www.macplay.com](http://www.macplay.com). Guide drops of water through various gizmos in this addictive arcade game.

### LOGITECH RUMBLEPAD

\$29.95, [www.logitech.com](http://www.logitech.com). This gamepad has an eight-way D-pad, two analog mini sticks, programmable buttons, a slide throttle, and force feedback.



### LOGITECH ATTACK 3 JOYSTICK

\$24.99, [www.logitech.com](http://www.logitech.com). With 11 programmable buttons, this joystick is a must for flight sims.

### MACSOFT TROPICO: MUCHO MACHO EDITION

\$19.99, [www.macsoftgames.com](http://www.macsoftgames.com). Play the ruthless dictator of a tropical island. Includes the original game, the Paradise Island expansion pack, and new scenarios.

## Kids' Stuff

### SPONGEBOB SQUAREPANTS KIDZMOUSE

\$24.99, [www.macplay.com/peripherals](http://www.macplay.com/peripherals). Do we really have to explain why this mouse is cool? Thought not.



### MARINE AQUARIUM 2

\$19.95, [www.serenescreen.com](http://www.serenescreen.com). This hyperrealistic screensaver brings tropical fish to your Mac.

## Media and Storage

### VERBATIM DIGITAL VINYL CD-R

\$10.60, [www.verbatim.com](http://www.verbatim.com). These blue, green, violet, and pink CDs look like old vinyl records.

### VERBATIM DIGITALMOVIE DVD+R

\$9.99 for 3-pack, [www.verbatim.com](http://www.verbatim.com). Burn your home movies to a 4.7GB DVD+R that looks like a film reel.

### M-SYSTEMS DISKONKEY 32MB

\$29.95 street, → [www.diskonkey.com](http://www.diskonkey.com).

This 32MB USB Flash drive is great for anyone who needs quick, easy, minimal storage.



### LACIE UNIVERSAL MEDIA DRIVE

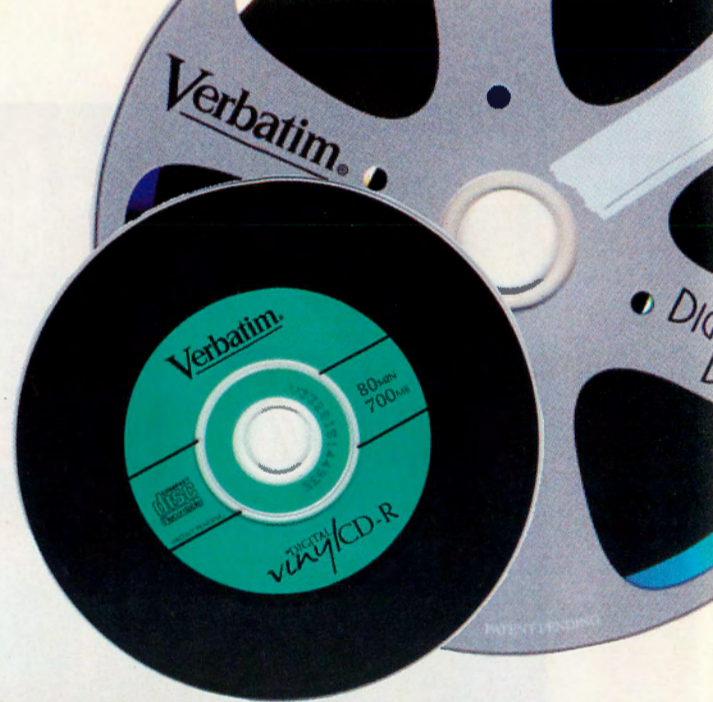
\$29.95, [www.lacie.com](http://www.lacie.com). This USB card reader supports six different card formats (CompactFlash, Microdrive, SmartMedia, Memory Stick, SD, and MMC).

### TAMRAC MX5392 M.A.S. PRO DIGITAL ACCESSORY KIT

\$29.95, [www.tamrac.com](http://www.tamrac.com). Anyone who juggles media cards will appreciate this pocket-sized media-card wallet.

### FELLOWES CD LEATHERETTE WALLET

\$26.39, [www.fellowes.com](http://www.fellowes.com). This 96-CD wallet falls into a boring—but very useful—category. Kind of like socks.



## iPod Stuff

### XTREME MAC PREMIUM IPOD CAR CHARGER

\$12.95 for older iPods or \$19.95 for newer iPods, [www.xtrememac.com](http://www.xtrememac.com). If you spend a lot of time in your car, plug this iPod charger into your cigarette lighter.

### SPECK PRODUCTS IPOD SKIN

\$18.95, [www.speckproducts.com](http://www.speckproducts.com). This gummy plastic covering flips open to accommodate the docking station. Older iPod users should get the XTREMEMAC HIPTUNES BUNDLE (\$19.95, [www.xtrememac.com](http://www.xtrememac.com)).

### RADTECH ICE CREME →

\$19.95 or \$24.95 for M bundle, [www.radtech.us](http://www.radtech.us). This iPod polishing kit comes with polish and buffing cloths. The Ice Creme M version also includes a metal polisher for the back.



## Reading Material

### MACFIXIT PRO SUBSCRIPTION

\$24.95, [www.macfixit.com](http://www.macfixit.com). An annual subscription to this troubleshooting Web site makes a good gift for that one friend who's always calling you for tech support.



#### MORE .MAC EMAIL STORAGE

\$10 for 25MB or \$30 for 50MB, [www.mac.com](http://www.mac.com). Apple .Mac users know how fast that free 15MB of storage goes—especially with all that spam.

#### Mobile Accessories

##### MACSKINZ LAPTOP COVERS →

\$30, [www.macskinz.com](http://www.macskinz.com). With these stick-on plastic covers, you can add graphics to any 12- or 14-inch iBook or 12-inch PowerBook.



##### OWC LAPTOP SCREEN PROTECTOR

\$14.95 to \$17.95 depending on size, [www.macsales.com](http://www.macsales.com). Never underestimate the power of a leather swatch to protect against keyboard markings.

##### KENSINGTON SONICLOCK →

\$23.79 street, [www.buy.com](http://www.buy.com). This three-digit combo lock with motion-detecting alarm fits in the security slot of your PowerBook or iBook.



##### POSTWORX SPEEDBALL

\$13.95, [www.macsales.com](http://www.macsales.com). These two little balls attach to a PowerBook or iBook so you can move it gracefully while keeping it cooler.

##### WATERFIELD DESIGNS →

##### ISIGHT CASE

\$24, [www.sfbags.com](http://www.sfbags.com). This ballistic-nylon, zippered case with padded interior is a stylin' travel companion for your Apple iSight Web cam, mount, and cable.



##### KEYSPAN ZIP-LINQ USB PHONE CHARGE CABLE

\$21.99 to \$29.99 depending on phone, [www.keyspan.com](http://www.keyspan.com). A retractable USB phone charger can come in handy on the road.

##### MARWARE SPORTFOLIO SHARKSKIN SLEEVE

\$29.95, [www.marware.com](http://www.marware.com). These 12- and 15-inch neoprene sleeves protect PowerBooks and iBooks from crumbs, pens, and things that go bump in your bag.

#### O'REILLY MACINTOSH TROUBLESHOOTING POCKET GUIDE

\$12.95, [www.oreilly.com](http://www.oreilly.com). This pocket-sized read offers advice on crashes, peripherals, and networking, among other things. Need something more challenging? O'Reilly's **MAC OS X FOR UNIX GEEKS** (\$24.95, [www.oreilly.com](http://www.oreilly.com)) covers the Mac-specific parts of Unix.

##### MACADDICT SUBSCRIPTION

\$24, [www.macaddict.com](http://www.macaddict.com). Shameless self-promotion? Maybe. A worthwhile investment? Definitely.

#### Other Stuff

##### DR. BOTT T3 HUB

\$27.95, [www.dr Bott.com](http://www.dr Bott.com). For the USB gadget fanatic, this tiny three-port hub is semi-self-powered.

##### RADTECH EYELIGHTER →

\$9.95, [www.radtech.us](http://www.radtech.us). This LED hooks around the ear to help guide those who compute at night.



##### KEYSPAN USB TRAVEL LIGHT

\$13.99, [www.keyspan.com](http://www.keyspan.com). If you liked Zelco's Itty Bitty Book Light in the 1980s, you'll love this USB reading light.

##### APPLE QUICKTIME PRO

\$29.95, [www.apple.com](http://www.apple.com). Upgrading to QuickTime Pro from the free QuickTime player gives users full-screen viewing, basic editing, and MPEG-4 authoring.



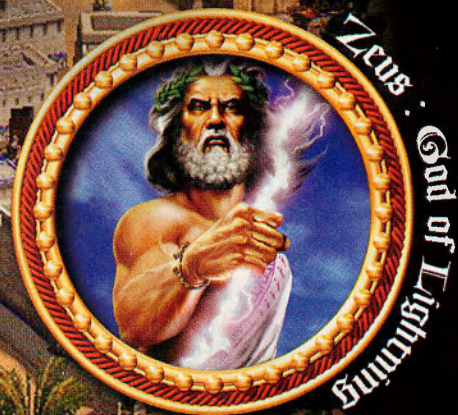
 MacAddict news editor Narasu Rebbapragada really likes the SportFolio, the Eyelighter, and the T3 Hub (hint, hint).

PICTURED LEFT FROM TOP: MacAddict magazine, Speck Products iPod Skin, Fellowes CD Wallet, Logitech Rumblepad, SpongeBob Squarepants KidzMouse RIGHT FROM TOP: Verbatim DigitalMovie DVD+R and Digital Vinyl CD-R, Marine Aquarium 2



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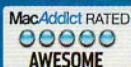


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Did somebody say multimedia? This month we got our mitts on the "lite" version of one of the best audio rigs known to Mac—the mighty Pro Tools LE software, which we used to mix, mash, and master audio via a righteous hardware control-surface-plus-audio-interface known as the Digi 002 (shown here). We also jazzed up our latest home-movie masterpiece with After Effects 6, backed it all up with Retrospect Desktop, and finally mastered and burned our A/V masterpiece in DVD Studio Pro. The best part? We split the workload between a Dual 2GHz Power Mac G5 and a 1.25GHz, 15-inch PowerBook. Talk about job perks!

## ThisMonth:

- 56 15-inch PowerBook G4 *notebook*
- 62 After Effects 6.0 *video-effects software*
- 54 Digi 002 *audio mixer and interface*
- 50 Dual 2GHz Power Mac G5 *G5 tower*
- 58 DVD Studio Pro 2 *DVD-authoring software*
- 53 Fire800 *FireWire 800 hard drive*
- 61 iView MediaPro 2 *media-cataloging software*
- 60 Photosmart 7960 *photo printer*
- 52 Pro Tools LE 6.1.1 *audio-processing software*
- 63 Retrospect Desktop Backup 5.1 *backup software*
- 64 Tony Hawk's Pro Skater 4 *skateboarding game*

## PLUS: TheHotList

66 The best of the best from recent reviews.

## COMING SOON:

We'll get creative with Macromedia Studio MX 2004 and Deneba's Canvas 9.

**X** Compatible with  
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**EDITORS'**  
**MacAddict**  
**CHOICE**

# Dual 2GHz Power Mac G5

G5 TOWER

The Dual 2GHz Power Mac G5 is the professional-level tower we've all been waiting for. This dualie is so powerful and elegantly engineered that one of our most rabid PC-fanatic friends announced, "Apple's previous stuff was bullshit, but the G5 is a real machine." While we strongly disagree with his first statement, we heartily second the second.

**The Dual 2GHz Power Mac G5 is big, brawny, and loaded with user-friendly niceties.**

Since we reviewed the 1.8GHz Power Mac G5 in last month's issue (see *Reviews*, Nov/03, p44), we'll just summarize the engineering advances here so that we can dig deep into the dualie's performance. Like the 1.8GHz model, the Dual 2GHz Power Mac G5

is big, brawny, and full of user-friendly niceties such as tool-free drive-upgrade capabilities, exceptionally quiet cooling fans, sophisticated power management, kick-ass input and output options, and an industry-leading 8GB RAM capacity.

The Dual 2GHz Power Mac G5, however, has additional performance-enhancing features. Most notable is a second 64-bit IBM PowerPC 970 processor, which Apple has dubbed the G5. Although Mac OS X and all current Mac software is not yet able to take advantage of all the 64-bit power of this processor, that muscle is ready and waiting for the day when a 64-bit OS and apps are released. Since all Power Mac G5s have a *frontside bus*—the channel that passes data between the processor and the rest of the system—that runs at half the speed of each processor, the 2GHz Power Mac has dual frontside

busses, each running at a scorching 1GHz. Another advantage of this speedy bus is that both processors use it to swap data in and out of each other's 512KB on-chip L2 cache, thus lessening the need for the L3 caches found on G4-based Power Macs, but not on the G5s. One final step up from the 1.8GHz model, which contains a nVidia GeForce FX 5200 Ultra video card with 64MB DDR SDRAM, is the dualie's snappier ATI Radeon 9600 Pro card, which also comes equipped with 64MB of DDR SDRAM.

So how much greater is the performance the Dual 2GHz Power Mac G5 pumps out compared to its single-processor, 1.8GHz little brother? The short answer is: It depends. Not all applications take advantage of multiprocessing (MP)—some apps (notably Photoshop) take advantage of MP for some operations and not others. In some cases, even filter settings can effect how well Photoshop handles MP. For example, Photoshop's Dust & Scratches filter, set to a radius of 8 pixels, is an MP screamer—so much so that in our testing (see "The Fastest Mac Ever...Usually," facing page), a Dual 1.42GHz Power Mac G4 could handily outpace a single-processor 1.8GHz G5. The Dual 2GHz G5, however, left the Dual G4 in the proverbial dust.

The Dual 2GHz G5's speedy video card also gives it a boost over the single-processor 1.8GHz G5, which lagged behind even the Dual 1.42GHz G4's 64MB ATI Radeon 9000 Pro in two of our three Unreal Tournament 2003 and Quake III framerate tests: The 1.8GHz G5 achieved framerates of 75 and 40 on the UT2003 Flyby and Botmatch, and 209 on Quake III, while the Dual G4 hit 77, 35, and 261, respectively. The Dual 2GHz G5 beat them both, with framerates of 80, 55, and 392. One of our other tests, however, showed the G5 systems lagging behind the top-of-the-line G4: ripping MP3s in iTunes. As of press time, Apple hadn't told us why, but we suspect it may have to do with the fact that the G4's SuperDrive is a Pioneer DVR-105, while the G5s are equipped



**COMPANY:** Apple  
**CONTACT:** 800-795-1000  
or 408-996-1010, [www.apple.com](http://www.apple.com)  
**PRICE:** \$2,999

**SPECIFICATIONS:** Dual 2GHz PowerPC G5 processors, each with 512KB L2 cache; 1GHz frontside bus, 512MB SDRAM, 160GB Serial ATA hard drive, SuperDrive, 64MB ATI Radeon 9600 Pro

**GOOD NEWS:** Fastest Mac ever. Exceptionally quiet. Easy, no-tools-required maintenance.

**BAD NEWS:** Big. Low stock RAM. Most software has yet to be optimized for dual processors and G5s.

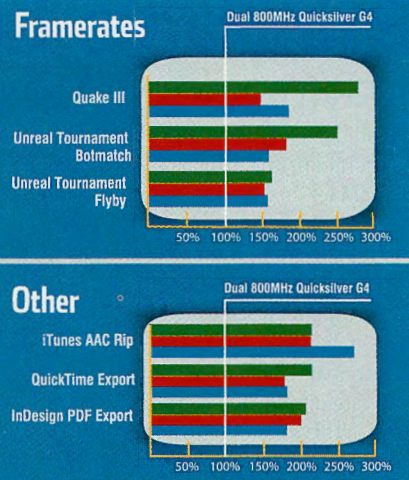
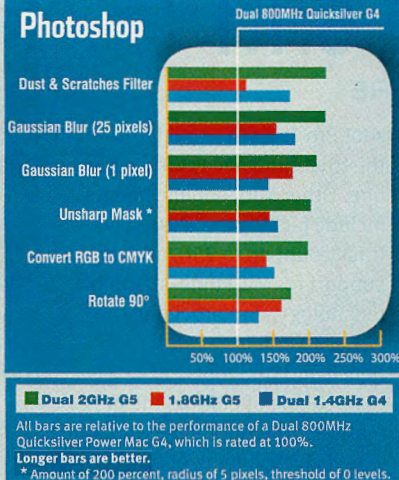
**MacAddict RATED**  
**AWESOME**



# THE FASTEST MAC EVER... USUALLY

We ran Photoshop processes, game framerate tests, and other operations on the Dual 2GHz Power Mac G5, its single-processor 1.8GHz sibling, and the former king of the hill, the Dual 1.4GHz Power Mac G4. We then compared their performance to that of a Dual 800MHz Quicksilver Power Mac G4. In all but one test—ripping an audio CD to AAC in iTunes—the Dual G5 reigned supreme.

The Power Mac G5s were running Mac OS 10.2.7, and the Power Mac G4s, Mac OS 10.2.6. Each was equipped with 512MB of RAM. Photoshop's Memory Usage was set to 100 percent in the Memory & Image Cache Preference. Photoshop tests were performed on a 115MB PSD file. The QuickTime Export test was of a 2GB DV file exported to MPEG-4. The InDesign PDF Export test was done with a 6.9MB document with 37.8MB of eight linked images. The



iTunes AAC Rip test was done with a 402.1MB CD (*Sergeant Pepper's Lonely Hearts Club Band* for you nostalgia buffs) ripped at High Quality (128 KBps). The Quake III framerate tests used Quake III: Arena X 1.3.2 at default settings with Normal Quality graphics and the audio engine disabled. The Unreal Tournament framerate tests used Unreal Tournament 2003 1.0 at the game's default setting using the Asbestos Flyby and Botmatch demos.

with Sony DW-U10A SuperDrives.

One complaint we have with the Dual 2GHz Power Mac G5—and with all Power Macs, for that matter—is that they come equipped with too little RAM to work efficiently with large files. The good news is that although recent high-end Power Mac G4s were limited to a maximum of 2GB of RAM, both the Dual 2GHz and single-processor 1.8GHz G5s can handle up to 8GB of RAM thanks to the higher memory-addressing capabilities of their 64-bit processors. (The low-end G5—the single-processor 1.6GHz model—is limited to 4GB of RAM.)

To test how additional RAM boosts Photoshop performance on the G5s, we created an automated Photoshop Action (see "Put Your Mac to Work," Nov/03,

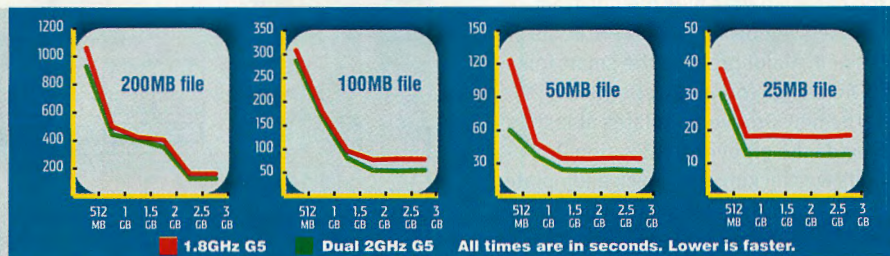
p18) that performs a series of common image-processing tasks, including some that are MP-aware. We then ran this Action on various-size files on both the Dual 2GHz and single-processor 1.8GHz G5s, first with the stock 512MB RAM allotment, then with 512MB more, then with 512MB more—all the way up to 3GB in each system. The results were dramatic (see "RAM? Cram It!," below): On the Dual 2GHz Power Mac G5, the same 200MB file that required a full 15 and a half minutes to process in 512MB of RAM took a mere two minutes and change when it had 2.5GB of RAM. Even the processing of a 25MB file benefited from more RAM—in fact, a small bump-up to 1GB RAM caused our test Action to complete its work in about one-third the

time it took when confined to the stock 512MB. If you're a Photoshop power user who plans to invest in a Power Mac G5, toss a few more bucks at a hefty heap of RAM. One final note on our RAM-cram testing: At each RAM and file-size level, the performance of both the Dual 2GHz and single-processor 1.8GHz G5s leveled out at a certain amount of RAM—but the dualie's leveling-off points averaged about 45 percent faster than the single-processor model's.

Not only is the Dual 2GHz Power Mac G5 the fastest Mac ever, but after developers optimize all their software for the G5 processor, Apple rolls out a 64-bit OS, and developers create 64-bit applications, it'll be even faster. We can't wait.—Rik Myslewski

## RAM? CRAM IT!

Photoshop, like most apps that work with large files, benefits greatly from hefty chunks of RAM. To find out *how* greatly, we created a custom Photoshop Action that performs a series of common image-processing procedures, and then ran that Action on the Dual 2GHz Power Mac G5 and its single-processor bro, the 1.8GHz G5. We increased the RAM from 512MB to 3GB in 512MB increments, and used 200MB, 100MB, 50MB, and 25MB PSD files. As RAM increased, so did performance.



Both Power Mac G5s were running Mac OS 10.2.7. Photoshop's Cache level was set to 4, its Memory Usage was set to 100 percent in the Memory & Image Cache Preference, and all its History Options were unchecked. The Photoshop Action consisted of the following steps: Gaussian Blur, 50 pixel radius; Revert; Gaussian Blur, 1-pixel radius; Unsharp Mask, amount of 150 percent, 2-pixel radius, threshold of 0; Despeckle; Dust & Scratches, 8-pixel radius, threshold of 0; Sharpen Edges; Rotate, 90 degrees clockwise; Mode Change, RGB to CMYK; Resize, 150 percent, proportions constrained, bicubic interpolation; Save As, TIFF, no compression; Christmas Tree on the White House Lawn, lit (just kidding about that last one).



# Pro Tools LE 6.1.1

## AUDIO-PROCESSING SOFTWARE

Audio geeks the world over are heralding the arrival of Pro Tools LE for Mac OS X, and with good reason: It's finally here and rock solid as ever, and it adds some valuable new tricks, including the practical DigiBase media manager and the radical ReWire plug-in, which changes the whole game by letting us link our existing synth software directly to Pro Tools.

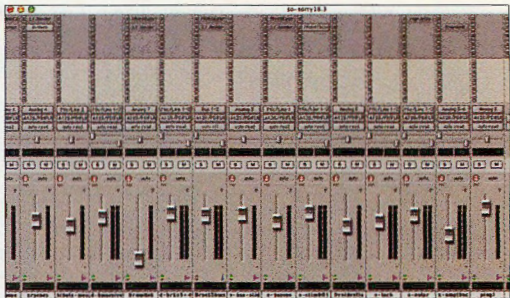
As of this version, Pro Tools only supports OS X—so if you want the new features, you gotta kiss OS 9 goodbye. Version 6 promises increased stability, enhanced dual-processor support, and a tastefully appointed interface that works much like the previous version but looks a lot better—like it means business. There are more small changes to version 6 than we can fit on this page, so we'll stick to the biggies.

DigiBase, the new media browser, is a godsend. It lets you create catalogs to easily organize all of your storage media, and includes standard browser functions such as View, Search, Copy, Delete, Audition, and Relink Missing

zoot Pro Tools TDM systems—and the trust fund necessary to buy one. Other MIDI enhancements include jacking the MIDI track count up to 256, adding support for MIDI time-stamping technology, and providing the ability to edit notes with the pencil and trim tools.

Speaking of editing, the new feature there is Relative Grid mode, which gives you the option to move regions—that's Pro Tools parlance for chunks of audio or MIDI—to fall either on or between established beats. You could accomplish this before by trial and error, but it would usually screw up the groove of the region. Now it doesn't.

Pro Tools is all about plug-ins, and now you can add them while a session is playing—gone are the days when you had to bring a mix session to a screeching halt to try out different plug-ins. Better yet, the new DigiRack ReWire plug-in allows you to run your ReWire-compatible apps, such as Live and Reason, through Pro Tools so you can



You can use Pro Tools' software control interface, or you can plug in a hardware controller like the Digi 002 (see p54).

take advantage of all of its processing glory. The only downside is that when you have another app plugged in, you've got a processor/memory hog that leaves you drooling for a G5. But in good news, the 6.1.1 update comes with a real Core Audio driver, so you can hear your other audio apps via Digidesign hardware—this is the holy grail of digital audio.

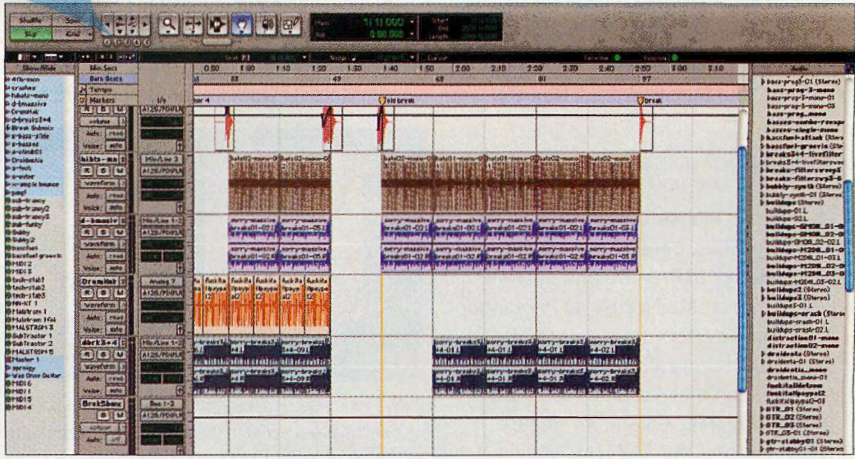
All in all, Pro Tools LE 6 is supersweet. It's as easy to use as ever, and much easier to set up, thanks to OS X's Core MIDI and Core Audio. The software—and the accompanying Digi 002 hardware (see p54)—performed flawlessly with nary a crash or worry, and we rocked it hard with some heavy, complex sessions. If you've already got compatible hardware, the \$75 upgrade fee is nothing; if you're starting from scratch, you'll have to buy some hardware like the Digi 002. Just do it—there's never been a better time to invest in Pro Tools.—Kent Carmical



You need pro tools to do a pro job, and Pro Tools has them.

Files—that last one solves what was previously a real pain in the backside. You can even drag files directly from browser windows into your Pro Tools session. Major props to the smart folks at Digidesign for refining DigiBase.

The new Groove Templates at last provide the groove quantization Pro Tools was lacking—just pick a template and instantly transpose its mojo or “feel” onto your rookie-ass, straight-feeling beats. Unfortunately you can't create your own DigiGroove templates unless you have access to Digi's high-



**COMPANY:** Digidesign  
**CONTACT:** 800-333-2137 or  
650-842-7900, www.digidesign.com  
**PRICE:** \$75 (upgrade from any Pro

Tools LE version) or free with Digi 002 or 002 Rack (see p54); no stand-alone version available  
**REQUIREMENTS:** 733MHz G4 or 800MHz iBook, Mac OS 10.2.6, 384MB RAM, QuickTime 6.1 or later

**GOOD NEWS:** Core Audio driver included!  
ReWire plug-in adds support for software synths.  
**BAD NEWS:** Quickly becomes an expensive habit.

**MacAddict RATED**  
AWESOME



# Fire800

## FIREWIRE 800 HARD DRIVE

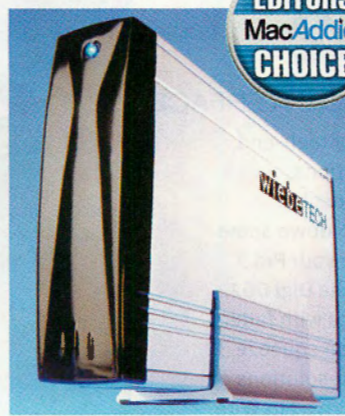
Besides its freakishly high, 300GB capacity, this drive is as versatile as they come: Around back are dual FireWire 800 ports, flanked by single FireWire 400 and USB 2.0 ports. Under the sleek aluminum hood is a Maxtor MaXLine II ATA/133 drive that, at 5,400 rpm, isn't the fastest-spinning mechanism you can get, but its 300GB capacity makes it a king among hard drives—this week, anyway.

Most high-performance drives spin at 7,200 rpm—but does the missing 1,800 rpm cramp file-transfer speed? According to our stopwatch, not a bit. When reading and writing a 2GB file to and from a Dual 1.25GHz Power Mac G4, the Fire800 hit 44 and 40 MBps, respectively. Reading and writing smaller files was a tad

slower: 41 MBps and 35 MBps. Despite the Fire800's slower rotational speed and meager 2MB cache (many high-performance drives have 8MB), it holds its own against other FireWire 800 drives we've seen.

After these real-world tests, we pulled out the heavy artillery: our patent-pending MacAddict Packet-o'-Pain, which throws 100MB of 4KB files at its victim. The P-o'-P throttled the Fire800 down to 2 MBps—which is, believe it or not, about twice as fast as some drives achieve in this brutal test.

How can it be that a 5,400-rpm drive outperforms a faster-spinning, 7,200-



This big, fast drive is perfect for doing video work on a big, fast Power Mac.

rpm drive? The simple answer lies in areal density—how many bits a drive squeezes onto a given area of a disk platter. Although most 7,200-rpm drives can get to the target data more quickly and spin it under the read-write head faster, a 5,400-rpm drive with greater areal density can offset access-time and data-zipping-under-the-head differences

and turn in great performance. You can read a more in-depth answer online at <http://macintouch.com/firewiredrives.html>, but trust us—this drive is fast. —Niko Coucouvanis

9

**COMPANY:** WiebeTech  
**CONTACT:** 316-744-8722,  
[www.wiebetech.com](http://www.wiebetech.com)  
**PRICE:** \$589.95

**REQUIREMENTS:** FireWire 800—,  
FireWire 400—, or USB-equipped  
Mac, Mac OS 9.1 or later

**GOOD NEWS:** Solid, stylish case. Huge capacity. Better sustained speeds than most 7,200-rpm drives. Multiple inputs.  
**BAD NEWS:** Slower access times than most 7,200-rpm drives. Expensive.

**MacAddict RATED**  
GREAT

PHOTOGRAPH BY MARK MADEO

- 800 dpi
- For righties + lefties
- Optical tracking

OPTICAL

## Mini-Mice for Macs

Three handy alternatives to touchpads for professionals on the go

800

Switchable.

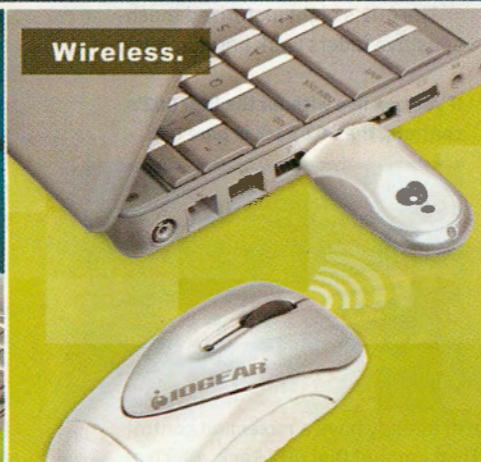


USB Optical Mini Mouse  
400, 600, 800 dpi

- Switch allows selection of 400, 600, or 800 dpi resolution to adjust sensitivity
- Small and light weight
- Works in tight spaces

GME222

Wireless.

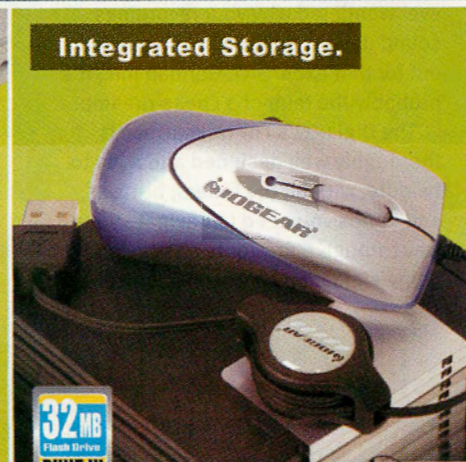


USB RF Wireless  
Optical Mini Mouse, 800 dpi

- Eliminates cords
- On/off switch conserves power
- Rechargeable thru USB charger (Included)

GME223R

Integrated Storage.



Memory Mini Mouse 800  
with 32 MB Flash Memory

- Mouse and memory, all-in-one
- Stores the equivalent of 30 floppies
- Retractable ribbon cable

GME224M32

IOGEAR INC. 23 Hubble Irvine, CA 92618 P: 949.453.8782 ext 2003 <http://mac.iogear.com>

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**IOGEAR**  
New Thinking, New Style



# Digi 002

## AUDIO MIXER AND INTERFACE

Long the mack daddy of high-end digital-audio workstations, Digidesign has flexed its design muscle again, and thrown down some hot hardware to complete your Pro Tools LE setup (see 52). The Digi 002, a complete studio package with faders and transport controls, can squeeze 32 tracks of digital audio at resolutions of up to 24-bit/96KHz through a FireWire connection to your Mac. Life is good.

On its backside, the 002 is almost wall-to-wall audio-in and -out ports. You get a Lightpipe I/O that can switch between eight-channel ADAT and two-channel S/PDIF optical connectors, as well as two-channel RCA-jack S/PDIF connectors. The I/O fun doesn't stop there. The 002 also has six analog outs for sending signals to external processors; stereo main outputs with parallel 1/4-inch and RCA monitor outs; and RCA inputs you can use for two-track monitor returns or swap with analog inputs numbers seven and eight. The remaining eight are analog inputs, four of which have wicked-sounding mic preamps; this is good news, because a lot of manufacturers chintz out on preamps—Digidesign doesn't. If you've ever wondered why your recordings sound dead even though you shelled out for that expensive German mic, it's probably the fault of a cheap preamp.

The Digi 002's control surface is thoroughly well designed and a joy to twiddle, with all the faders, buttons, and knobs you need to navigate your way through a Pro Tools LE session. Using almost any hardware control



**Your Pro Tools studio needs hardware, and the Digi 002 has all you need, integrating multichannel audio ins and outs with a mixer and control board.**

is preferable to mixing audio with a mouse onscreen, and the 002's well-positioned controls feel reassuringly like those on an old-school mixing board. Tape-deck-style transport and navigation controls are just where your right hand expects them to be, and the modifier keys that mimic the Shift, Command, and Option functions of the Mac keyboard controls are placed conveniently on the left. Digidesign wisely chose to leave some tasks, such as plug-in selection and assigning outputs, to the mouse-screen combo instead of cluttering up the control surface with more buttons—its easier to do that stuff onscreen, anyway.

The 002's eight motorized touch-sensitive faders work harmoniously

with the 10 four-digit LED *scribble strips*—LED panels that improve upon impromptu masking-tape labels—to remind you which knob does what by displaying track name, status, send level, or plug-in name, depending on the fader mode. The motorized faders work in four banks of eight (for up to 32 tracks) with the included Pro Tools LE software, and spring to life when responding to automation data, as if some ghostly hand were moving them. Above the faders are eight multipurpose rotary knobs for setting track levels and controlling effects. These are surrounded by 15 LEDs that can show knob position or act as VU meters—pretty slick. Finding out that the 002 can also function as a stand-alone eight-in, four-out digital mixer with built-in dynamics, EQ, and reverb processors was like finding that extra layer of cookies in a bag of Pepperidge Farm Mint Milanos. This adds a lot of value to the 002 package.

If you're happy with your current mixer and just want to upgrade your Pro Tools LE system, check out the Digi 002's I/O-only little bro, the Digi 002 rack (see "Rack it, Jack," left); if you're setting up a sound studio from scratch, the 002 (Pro Tools LE included) is all you need to get started. When you factor in the control surface and stand-alone-mixer mode, it's a great deal compared to assembling all the parts from different manufacturers.—Kent Carmical



## RACK IT, JACK

If you can't afford the full Digi 002 package or already have a mixer and control surface, there's another 002 for you: the 2U rackmount Digi 002 Rack, which at \$1,295 is half the 002's price. It has the same conglomeration of ins and outs but no onboard controls or stand-alone mixer capabilities—you do all your level adjusting and knob twiddling via your Mac's display or a dedicated control board.



**COMPANY:** Digidesign  
**CONTACT:** 800-333-2137 or 650-842-7900, [www.digidesign.com](http://www.digidesign.com)  
**PRICE:** \$2,495 (Digi 002), \$1,295 (Digi 002 Rack)  
**REQUIREMENTS:** 733MHz G4 or 800MHz iBook, Mac OS 10.2.6, 384MB RAM, QuickTime 6.1 or later

**GOOD NEWS:** Hands-on hardware control is where it's at. Plenty of ins and outs. Stand-alone mixer mode adds versatility.  
**BAD NEWS:** Expensive. Stand-alone mixer features only work in stand-alone mode.

**MacAddict RATED**  
**GREAT**



# Don't Get Burned Buying Memory Upgrades!

## Three Questions Other Memory Providers Hope You'll Never Ask...

### Were you awarded Computer Shopper's "Best Place to Buy RAM" two years in a row?

50,000 readers in 51 computer-related categories voted Crucial **Computer Shopper's** "Best Place to Buy RAM" two years in a row!



*"As the official factory outlet for Micron Technology's RAM-manufacturing facilities, (Crucial) offers near-wholesale pricing for a broad array of top-quality memory modules...you have to wonder why anyone would buy memory anywhere else."*

— Computer Shopper magazine

### Do you actually make the memory you sell?

WARNING! Listen carefully to the answer when you ask this question. Other memory companies claim to manufacture memory, too. What they actually do is assemble the memory chips made by someone else into memory modules. Ask them this: Do you make the chips that go on your memory modules? The chips are the important part, after all.

Crucial is the only memory upgrade supplier that's part of a major DRAM manufacturer, Micron. We actually make the chips that go on the modules. In fact, because the world's leading

computer manufacturers use our memory, chances are good that the memory in your system right now came from Micron. Crucial brings this same high-quality memory directly to you. It only costs less because you don't pay middleman mark-up fees.

### Do you offer easy access to over 110,000 guaranteed-compatible upgrades for more than 20,000 systems?

Finding the right memory for your specific system can be confusing—and risky. With so many different systems and so many different types of memory, you can't just buy a "128MB memory module" and be assured that it will work in your system.

Using Crucial's award-winning Memory Selector™, finding the right memory is as easy as 1, 2, 3. In just three easy clicks, you'll find your upgrade—and it's 100% guaranteed to be compatible with your specific system or we'll give you your money back. With more than 110,000 upgrades for over 20,000 systems, including more than 390 upgrades for over 150 Apple systems alone, we've got what you need.



*"I no longer have to wait for my machine to be responsive, and I am now back in the "speed" demon seat. If you want to improve the capacity of your Powerbook, I offer no hesitation in recommending the Crucial 512MB PC133 SODIMM upgrade."*

— EnvyNews.com

#### Over 390 Apple upgrades...

- ✓ For over 150 Apple desktops, notebooks, workstations, and servers.
- ✓ 100% compatibility guarantee
- ✓ Free technical support
- ✓ Limited lifetime warranty

#### Factory-direct quality and savings!

128MB SDRAM... As low as **\$25.99**  
256MB SDRAM... As low as **\$46.99**  
512MB SDRAM... As low as **\$85.99**

**FREE SHIPPING\***

**crucial**  
TECHNOLOGY  
A Division of Micron

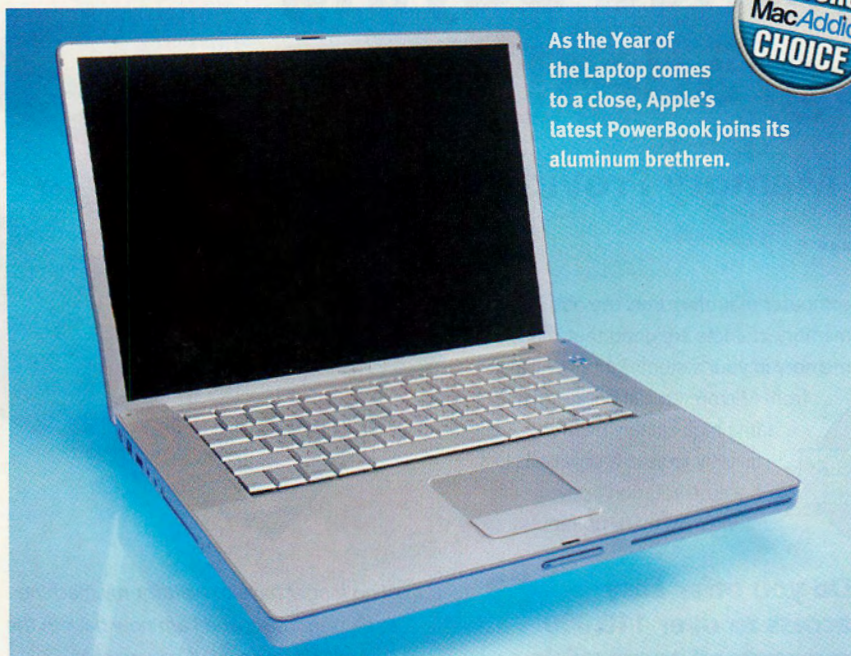
The answers to all your Apple memory questions are just a click away!  
**http://promo.crucial.com**      keycode: **3mad**  
or call toll-free 1-888-363-2562 to talk to a memory advisor.

\*See Web site for details.

Prices may vary according to specific system requirements. The price listed was valid on 10/2/03 when we sent this ad to the publisher; however, prices may have dramatically increased or decreased since then. Visit the FAQ section of Crucial.com to learn more about why memory prices go up and down.

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As the Year of the Laptop comes to a close, Apple's latest PowerBook joins its aluminum brethren.

512KB), claiming the level 2 cache's higher speed offsets the missing level 3 cache. Our stopwatch agrees; the new 1.25GHz 'Book outpaced the old 1GHz model by 30 to 50 percent during our test suite of Photoshop processes and QuickTime conversions. This was more of a speedup than we expected from a straight 25 percent boost in clock speed. You can easily gain even more speed by upgrading the PowerBook's paltry 512MB of preinstalled RAM to 1GB—or better yet, to the full 2GB capacity.

The aluminum-alloy chassis enclosing the 15.2-inch screen is, to quote Goldilocks, "just right." More precisely, it's 13.7-by-9.5-by-1.1 inches of gorgeous technology whose hull won't scratch nearly as easily as a TiBook's, though it's a bit taller and wider. One thing we'll miss is the TiBook's well-behaved lid latch—the new 'Book's lid is a work of art when it's open but prone to rest unevenly, cocked to one side, when closed. This might seem trivial, and it's not apparent on every unit, but we noticed it on our test unit and on both 17-inchers we've received. Sloppy.

The new case, however, is elegant in other ways. The ports, for instance, are conveniently split up so that you get a USB 2.0/1.1 port on both sides of the machine. Other ports on the right-hand side include FireWire 400, FireWire 800, Gigabit Ethernet, S-Video out (S-Video-to-composite RCA adapter included), and DVI out (DVI-to-VGA adapter included). On the left are analog audio in and out, v.92 modem, AC-power

connector, plus a PC-card slot. Up front is the slot-loading SuperDrive.

Calling it a desktop replacement is a bit of a stretch—the desktop bar's been raised by the mighty Dual 2GHz Power Mac G5 (see our review on p50). But if portable power is your prime directive, the 15-inch PowerBook is the just right answer to your this one's too small, that one's too big PowerBook dilemma.

—Niko Coucouvanis

# 15-inch PowerBook G4

## NOTEBOOK

The wait is over. The new aluminium 15-inch model fits right in line with the luxe 17-inch PowerBook G4 (Reviews, Jun/03, p42), both cosmetically and technologically, and makes a worthy replacement to the revolutionary titanium PowerBook G4.

We got our hands on the high-end 15-inch model, which clocks in at 1.25GHz and includes all the upgrades you'd expect, including preinstalled AirPort Extreme and Bluetooth for wireless communications, a 24X16X4 CD- and 8X2 DVD-burning SuperDrive, and a whopping 80GB hard drive. A welcome contribution from the 17-incher: a backlit keyboard, which comes standard on the model we tested. If you go for the low-ball 1GHz, Combo Drive—equipped 15-inch PowerBook, spend the extra \$69 for a backlit keyboard—when the room goes dark and the keyboard letters light up, you'll be glad you did.

Other benefits of evolution beyond the 1GHz TiBook include next-generation FireWire 800 and USB 2.0 interfaces, the fast DDR (double-data rate) SDRAM found in all of Apple's high-end hardware, a faster system bus (167MHz, compared to the TiBook's 133MHz), and an updated version of the 64MB ATI Mobility Radeon chipset—the 9600. Apple has removed the TiBook's hefty 1MB level 3 cache, and replaced it with double the level 2 cache (now

## THREE SIZES FIT ALL

Apple revved the whole PowerBook G4 line along with the 15-inchers' revival, adding a few hundred megahertz to each 'Book's processor. The 12-inch now clocks in at 1GHz, while the fastest PowerBook—the 17-incher—hums along at a speedy 1.33GHz. All three models now have USB 2.0 and FireWire 800, as well as AirPort Extreme and Bluetooth support (or preinstalled in some configurations), with SuperDrive configurations across the board.



Small, medium, and large—aluminum PowerBooks rock!



**COMPANY:** Apple  
**CONTACT:** 800-795-1000 or 408-996-1010, [www.apple.com](http://www.apple.com)  
**PRICE:** \$2,599

**SPECIFICATIONS:** 1.25GHz G4 processor with 512KB L2 cache, 512MB DDR333 SDRAM, 80GB Ultra ATA/100 hard drive, 2X SuperDrive, 64MB ATI Mobility Radeon 9600 Pro, AirPort Extreme, Bluetooth, v.92 modem, Gigabit Ethernet.

**GOOD NEWS:** Just-right, 15-inch screen. Doesn't run too hot.  
**BAD NEWS:** Lid tends to sit unevenly when latched. Limited stock RAM.

**MacAddict RATED**  
**GREAT**



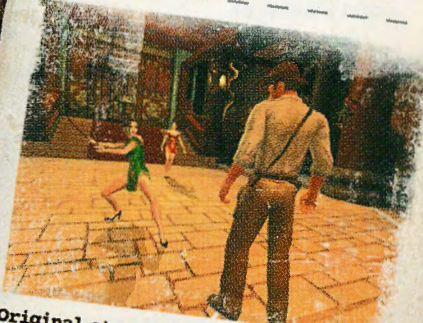
Northern  
LUCASARTS ENTERTAINMENT COMPANY PRESENTS  
**INDIANA JONES**  
AND THE  
EMPEROR'S TOMB™

Enter The Heart Of The Dragon

FIG. 4



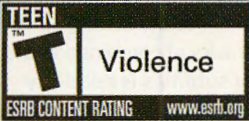
Leap, swim, climb and punch your way through exotic locales.



Original storyline with new villains, wicked enemies and an alluring partner.



Shotguns, submachine guns, improvised weapons – and of course, Indy's trusty whip and pistol.



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[www.aspyr.com](http://www.aspyr.com)





# DVD Studio Pro 2

DVD-AUTHORING SOFTWARE

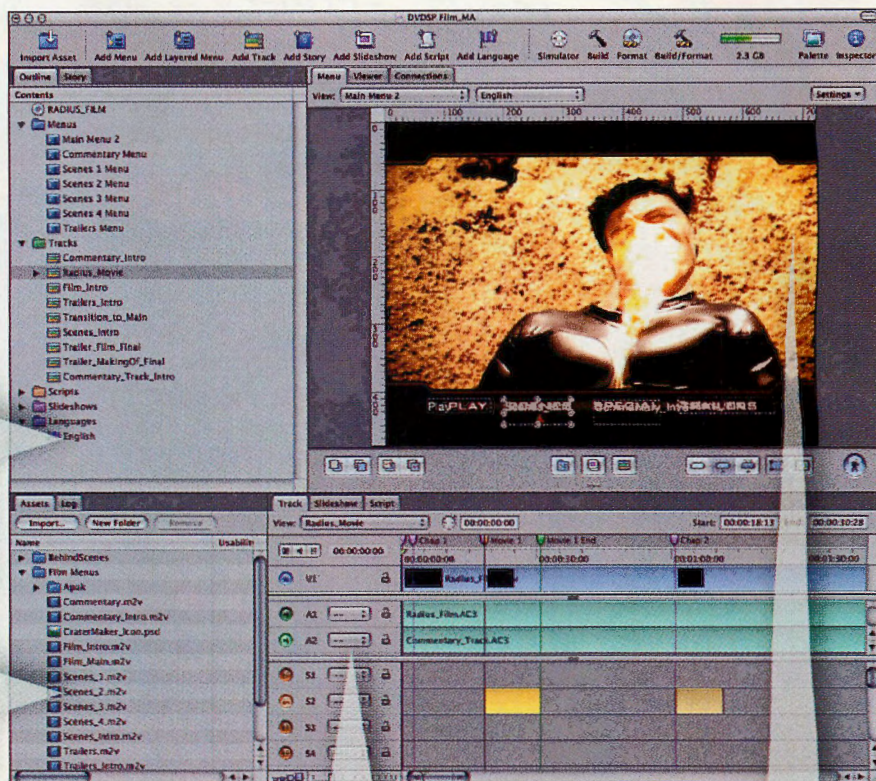
Behold! DVD Studio Pro's new Advanced Interface in all its multitabbed splendor!

Gone is the old graphical view, which showed your DVD content as a flowchart. Now projects appear in the Outline tab, represented by folders containing menus, tracks, scripts, and so on.

Any media you import goes here in the Assets tab. You can now use folders to keep things tidy (woo-hoo!).

You build your tracks in much the same way as you'd edit video in Final Cut. Our main film track features one video stream, two audio streams, and two subtitle streams, plus some editable markers for good measure.

Design your DVD's menus here—just drag and drop your content right into the window.



Until now, DVD Studio Pro has been the problem child in Apple's pro media lineup. Sure, it could get the job done, but not without intermittent crashes, strange quirks, and a clunky interface. Apple wisely didn't simply try to repair it—it built version 2 from the ground up, and the result is a product that's stable, stuffed with new features, much easier to use, and half the price of older versions.

When you first launch DVD Studio Pro 2, it presents the Choose Application Configuration window, which gives you a choice of Basic, Extended, or Advanced interfaces. If you want to

create DVDs quickly and easily, start with the Basic interface—you can always upgrade later via the Window menu. The Basic interface works a lot like iDVD—that is, you pick a predesigned theme (there are dozens of good ones for weddings, sports, vacation videos, biz presentations, and so on), then add your own text and drop in your own videos as animated buttons and backgrounds. When your project gets a little more complex, you can step up to the Extended interface, which adds a Track Editor (more on that in a moment) and Property Inspector for manipulating your clips, and an Asset manager for

organizing source materials.

For industrial-strength DVDs, switch over to the Advanced interface, which adds tabbed palettes and windows full of controls and editors for big-league features like multiple video and audio streams, subtitles, remote-control programmability, and scripting. It takes a bit of work to wrap your head around this interface, largely because there's so much to look at—we counted 20 tabs, which gives tab-king Photoshop a run for its money. Fortunately, setting up your menus and tracks of combined audio, video, and/or subtitles is relatively painless, as you largely just drag media



**COMPANY:** Apple  
**CONTACT:** 800-795-1000 or 408-996-1010, [www.apple.com](http://www.apple.com)  
**PRICE:** \$499

**REQUIREMENTS:** 733MHz G4 processor or faster (including G5), Mac OS 10.2.6 or later, 256MB RAM (512MB recommended), 8MB video RAM, 20GB disk space

**GOOD NEWS:** Industrial strength features. Sliding-scale interface. Half the price of the previous version.

**BAD NEWS:** Version 1.5 was snappier. Compressor app has quirks. AC3 Dolby Digital encoding is cumbersome.

MacAddict RATED





clips into menu or track editors, and then choose different options from pop-up menus that appear. For instance, you can assign a video background to a menu by simply dragging an MPEG-2 clip to the Menu tab, and then choosing Make Background from the pop-up menu. Next, drag another video clip to the same menu, and select Make

Button And Track from the pop-up—DVD Studio Pro responds by creating a thumbnail button for the track on your menu, creating a new track that holds the video clip itself, and linking the menu's new button to the new track. You can employ similar magic in the Connections tab, dragging and dropping menu and track icons

to program remote-control buttons—all of this makes it a snap to build a DVD's underlying structure.

Building tracks is also much more efficient now than in previous versions, thanks to a new Track Editor that works like a Final Cut Pro Timeline. For starters, you can see a track's various streams of video, audio, and subtitles all stacked together onscreen, and can easily preview content by scrubbing through the streams or jumping to any spot by clicking in the track's ruler. You can also trim media directly on the Timeline and merge multiple streams together, meaning you can join two MPEG-2 videos on the same track so that they play sequentially. Setting up chapter markers is also easy: Just click the ruler where you want the marker to go. If you change your mind later, you can reposition or delete markers.

Other improvements include the ability to create your own menus without resorting to Photoshop—you can format your menu's text, set custom colors, and choose from a library of well-designed shapes and button icons. You also get the ability to set loop points for menus (so that a motion menu can loop back to any frame), as well as an easier-to-use scripting engine, an integrated subtitle editor with support for fade ins and outs, a customizable interface that'll

remember your preferred toolbar items and window locations, and the option to manually set a dual-layer break point so that the pesky gap that occurs when a dual-layer DVD-9 disc switches layers doesn't automatically go where disc size dictates. Keep in mind, however, that you can't burn multilayer discs like DVD-9s at home unless you live in a

disc-production factory.

Still, there are a few things that bug us about DVD Studio Pro 2, such as much longer load times for projects, and interface sluggishness—for example, there's an annoying pause between the time you click an item and the time the item's properties appear. We also wish there were better tools for applying changes to

menus and tracks in large batches. For example, if you have 30 different tracks that should return to the same menu when the viewer presses Menu on their remote control, you have to set that functionality for each track, instead of selecting all your tracks and making one change that applies to all. Aren't computers supposed to spare us from doing the grunt work?

Finally, we have two issues with the bundled tools for encoding video, audio, and slideshows into DVD-friendly formats. The first gripe is with Compressor, Apple's stand-alone app that batch-compresses QuickTime movies into MPEG-2 files, among other formats. Compressor is very quick when encoding video, and offers very

**DVD Studio Pro 2's new script engine lets you build scripts with buttons, check boxes, and pull-down menus—no typing required. The only downside is that you can't quickly build new scripts by copying and pasting text strings since there are no strings with which to begin.**

Track Slideshow Script		
View: Commentary Audio Hex Values		
No.	Command	Comment
1	Set System Stream Au(Audio Stream 2) St(Subtitle Stream 2) (On) if (GPRM 1 = SPRM 7)	
2	Set System Stream St(Subtitle Stream 2) (On)	
3	Jump Radius_Movie: Chap 1	

good image quality, but be warned: The latest version (1.0.1) has some quirks when encoding videos exported directly from Final Cut Pro 4—the latter will sometimes quit during export, or Compressor will refuse to encode the video. One workaround is choosing Export: QuickTime Movie rather than the functionally identical Export: To

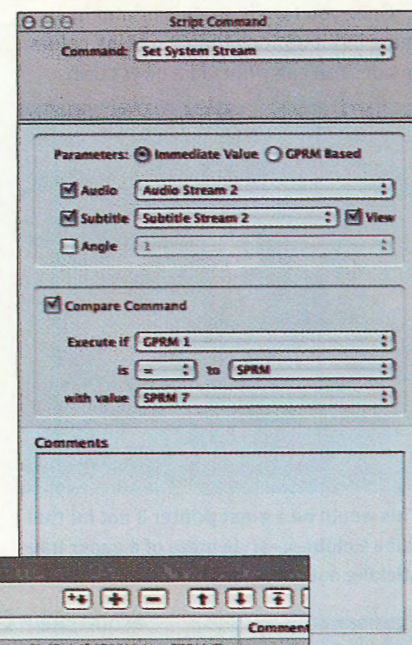
**DVD Studio Pro is the best value in authoring apps you can find.**

Compressor in Final Cut's Export menu.

Our other gripe concerns the tool used to encode audio into Dolby Digital AC3—the format used in most commercial DVDs. Apple bundles its old, clunky A.Pack application for AC3 encoding. This adds the tedious, nonautomated step of getting out of Compressor, launching A.Pack, and using it for your AC3 encoding—it's too bad A.Pack's audio processing couldn't be spun into Compressor.

That aside, we love DVD Studio Pro 2. Once you get the hang of its sprawling interface, you'll be able to build full-featured disks from scratch with relative ease and speed. At \$499 (\$199 upgrade), it's the best value in authoring apps you can find—the Windows world included.

—Helmut Kobler





# Photosmart 7960

## PHOTO PRINTER

Photo printers have evolved again. The latest breakthrough comes in the form of Hewlett-Packard's eight-color photosmart 7960. The extra color, Photo Gray, is the stuff black-and-white photographers dream of. With it, the 7960 cranks out some of the best black-and-white and silver-tone prints we've seen come out of an inkjet printer—and it's no slouch when it comes to printing color photos either. The 7960's finicky paper tray, however, taints the whole package.

In the box, you get four ink cartridges (Photo Color, Tri-Color, Black, and Photo Gray); a long power-adaptor cord; HP Inkjet Utility driver software; and HP Memories Disc software for burning slide show VCDs (video CDs) that'll play on most modern DVD players or in Web browsers. What's not in the box is a USB cable—annoying.

The Setup guide makes short work of putting it all together, even suggesting which print-cartridge configuration you should use for what type of printing: Photo, Tri-Color, and Black for normal printing; Photo, Tri-Color, and Photo Gray for higher-quality color or black-and-white printing.

Once you turn it on, this printer has more input options than it has ink colors inside. You can print via a direct USB



HP's new flagship photo printer, the Photosmart 7960, adds gray to the color palette, and the results are anything but dreary.

connection to your Mac the old-fashioned way; via another USB port up front that interfaces with HP's direct-printing digital cameras; or via a bank of memory-card slots that accommodate CompactFlash, Microdrive, SmartMedia, xD-Picture Card, MultiMediaCard, Secure Digital, and Sony Memory Stick. Aside from occasionally dropping the connection to our Mac occasionally while spooling a large USB print job, the 7960 behaved well on the communications front.

In action, the printer was reasonably fast, spitting out an 8.5 by 11 borderless print at the top-quality High Resolution setting in about 14 minutes; the next-best setting (Best) produced a nearly identical photo in about 13 minutes. Both prints looked great—neither was notably better. The Best setting produced a little more saturation in the blues, while High Resolution produced slightly more gradient detail. To test the printer's grayscale mojo, we printed up a long black-to-white gradient—it came out perfectly smooth at High Resolution, and only slightly banded at Best. We should mention that the kludgy paper tray ruined some pricey sheets of glossy

photo paper due to its poorly designed paper-width adjuster.

In fact, the photosmart 7960's paper-handling system is just wrong. In theory, it's some sort of unitray, combining a regular adjustable-width paper tray with a smaller, retractable Photo tray for 4 by 6 and smaller prints, which together form the base of the output tray. In reality, the tray assembly is flimsily built, and it required much effort to keep the photo tray properly loaded and functional. When our test unit's photo tray jammed, for example, we had to pop out the top half of the paper-tray ensemble, and then massage the photo tray's gears back into working order.

**This is the stuff black-and-white photographers dream of.**

Ultimately, however, the 7960's Photo Gray is a welcome addition to the inkjet palette. If you're serious about your black-and-white photography, you'll adapt to the printer's quirky tray, but if ease-of-use is more important to you than stellar black-and-white prints, go with something else.—Niko Coucouvanis



This would be a great printer if not for that Rube Goldberg-style mess of a paper tray sticking out of the front.



**COMPANY:** Hewlett-Packard  
**CONTACT:** 800-752-0900,  
www.hp.com  
**PRICE:** \$299.99

**REQUIREMENTS:** USB-equipped G3,  
Mac OS 9.1 or 10.1 or later

**GOOD NEWS:** Extra shade of black makes black-and-white and silver-toned prints look awesome. Decent speed.

**BAD NEWS:** Paper tray is flimsy and frustrating to use.

**MacAddict RATED**



**SOLID**



# iView MediaPro 2

## MEDIA-CATALOGING SOFTWARE

Now that everyone and their dog has a digital camera, hard disks around the world are filling up with digital media files, thus creating organizational nightmares of epic proportion. What we need is an industrial-strength tool for keeping track of all these files, and iView MediaPro 2 may be just the ticket.

There's a lot to MediaPro—and a lot to like about it. It has gobs of useful features; lets you work with more than 100 popular graphic, audio, and video formats for both Mac and PC; and has an intuitive interface that makes it easy to learn and use. It has many more

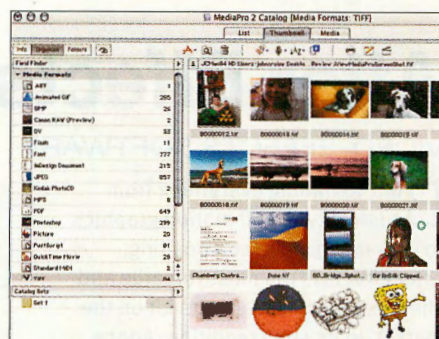


organizational features than iPhoto and holds its own against such popular stalwarts

as Extensis Portfolio 6 (\$199.95, [www.extensis.com](http://www.extensis.com)) and Canto Cumulus 5 (\$119.95, [www.canto.com](http://www.canto.com)).

Creating a new catalog is a simple matter of dragging icons into a catalog window. You can add files, folders, and local or network volumes, as well as entire CD-ROMs—each catalog can keep track of up to 128,000 files. When you build a catalog, the original files remain untouched—MediaPro stores the location, a thumbnail, and virtually every other bit of data available for each file. Once you build your database of files, you can tap into iView MediaPro's extensive annotation and search features to identify, search for, and sort them.

To say that iView MediaPro is just a handy tool for home users would be



**MediaPro knows all kinds of organizational tricks, such as viewing by file format, as shown here.**

selling the product short. Advanced features such as version control; the ability to create multimedia slide shows; the option to store, back up, and burn digital files to CD-ROM and other media; and the ability to automate tasks using AppleScript make it an ideal tool for both serious creative professionals and small workgroups.—John Cruise



**COMPANY:** iView Multimedia  
**CONTACT:** [www.iView-multimedia.com](http://www.iView-multimedia.com)  
**PRICE:** \$160 (single user), \$760 (5-pack), \$3,000 (25-pack), \$72

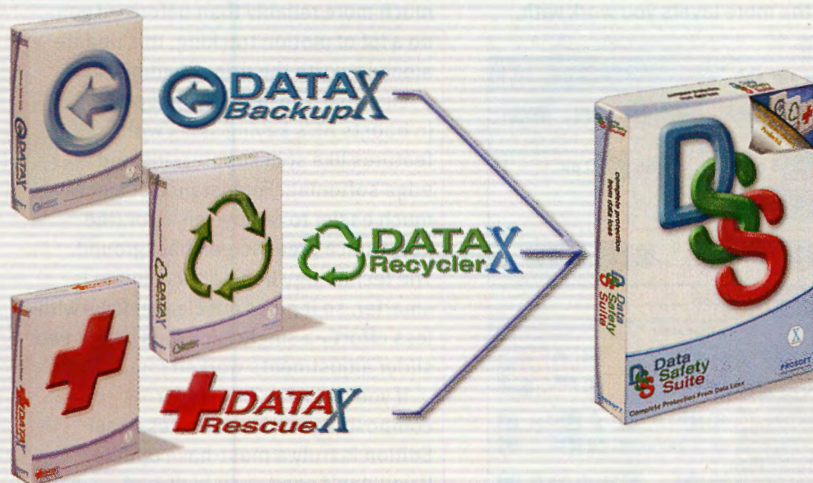
(upgrade from MediaPro 1.5)  
**REQUIREMENTS:** Mac OS 9.1 or 10.1 or later, QuickTime Pro 5.1 or later

**GOOD NEWS:** Easy to use. Good documentation. Lots of great features.

**BAD NEWS:** Unsupported media formats cause choking. Almost twice the price of previous version.



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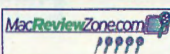
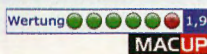
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Data Backup

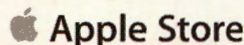


Data Recycler



Data Rescue

Data Safety Suite is available at



or call 1877-4PROSOFT



# After Effects 6.0

## VIDEO-EFFECTS SOFTWARE

Built to handle everything from custom type and motion graphics to live-action video compositing, After Effects is the most versatile and cheapest pro video-effects kit on the market. In its sixth rendition, Adobe has piled on tons of new features, including much better type handling and buffed-up compositing tools.

After Effects comes in two forms: the Standard edition (\$699), and the Professional edition (formerly called the Production Bundle; now \$999), which offers more effects plug-ins, a basic particle system, network rendering, and pro compositing-related features. Both editions share some big-ticket upgrades in version 6, starting with a new type-generation engine. Gone are the days of creating type in a lonely text window with no visual reference for previewing how it fits into the rest of your composition. Now you can simply click AE's new text tool in your Composition window, and type away. Any text you type becomes a layer in your Composition, which you can

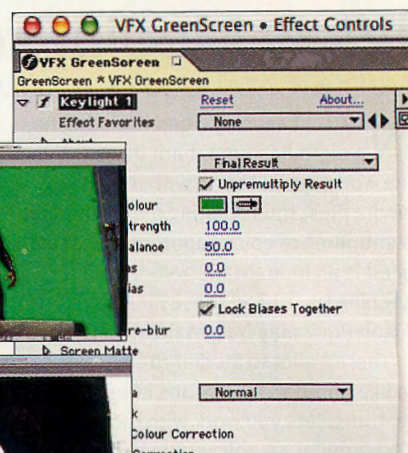


animate via keyframes on After Effects' Timeline. Version 6 adds a new range-

selection feature (which you can also keyframe to move over time) that allows you to add an effect to single characters or words, or to the whole text enchilada—this saves lots of time and patience.

After Effects 6 also brings an improved vector-paint engine, adding Photoshop-like paint tools and palettes. You can now apply paint effects in the Layer window, and pick from a wide assortment of brush strokes and transfer modes via the new paint palettes. A new, much-needed clone tool lets you select a source image from one image or video frame, and apply it as a stamp elsewhere in the current frame, in another frame, or in a series of frames—even on a different layer in the composition.

Finally, if you have an Open-GL video card, After Effects now taps that card to render effects in near-real time. This swiftness is especially noticeable when scrubbing through the timeline, and manipulating 3D elements like cameras and lights. Overall, the app just feels faster—the more layers you work with,



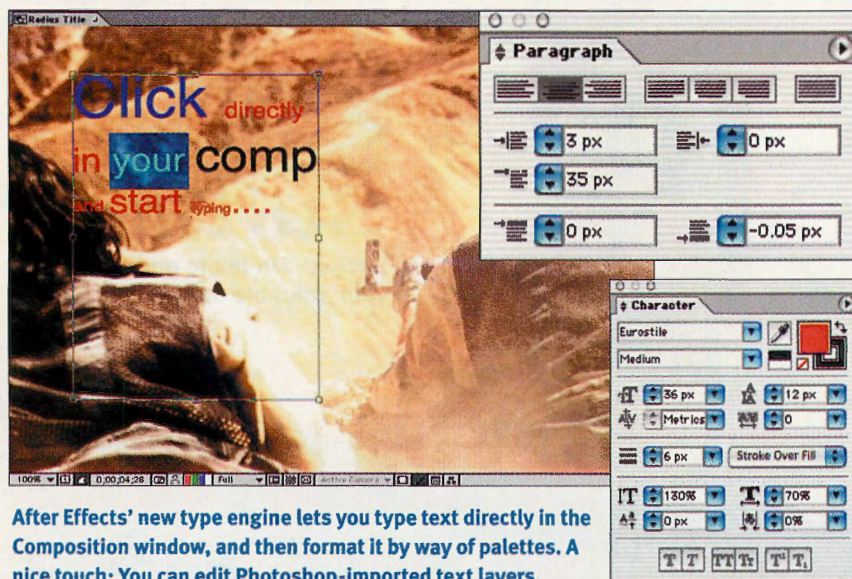
**It took just one click for Keylight to pull a usable character key from our hastily erected greenscreen.**

the more apparent this becomes.

If you splurge on Adobe's Professional Edition, you gain much-improved compositing tools. The app's completely overhauled motion tracker stands out, letting you set unlimited track points (anchors) and work natively at 1/256th of a pixel resolution (this level of precision minimizes interframe drifting in your tracking). Also, unlike the one in AE 5.5, the new motion tracker is extremely quick at analyzing tracks. The end result is that motion tracks work much more reliably than before—if you do a lot of motion tracking, this update alone is worth the price of admission.

Likewise, the new Keylight plug-in boosts AE's keying skills with features like spill suppression and edge softening. For instance, it's now much easier to remove an actor (the key) from a greenscreen background. The technology behind this plug-in is smarter, so it picks out cleaner keys with less effort—a single click plus one or two slider adjustments worked for us.

If you use After Effects for compositing work, the Professional Edition is truly a must-have update. If you don't need such high-end compositing firepower, the AE Standard edition, with its new type engine and zippy Open-GL rendering, is a worthy upgrade.—*Helmut Kobler*



**After Effects' new type engine lets you type text directly in the Composition window, and then format it by way of palettes. A nice touch: You can edit Photoshop-imported text layers.**



**COMPANY:** Adobe  
**CONTACT:** 800-833-6687, (Professional upgrade)  
 www.adobe.com  
**PRICE:** \$699 (Standard), \$999 (Professional), \$199 (Standard upgrade), \$299 (Professional upgrade)  
**REQUIREMENTS:** G3 (Dual G4 recommended), Mac OS 10.2.6 or later, 128MB RAM

**GOOD NEWS:** Much improved type engine and vector paint tools. Pro edition adds fantastic keying ability, plus fast, precise motion tracking.  
**BAD NEWS:** Occasional bugs and random crashes.

**MacAddict RATED**  
 GREAT



# Retrospect Desktop Backup 5.1

## BACKUP SOFTWARE

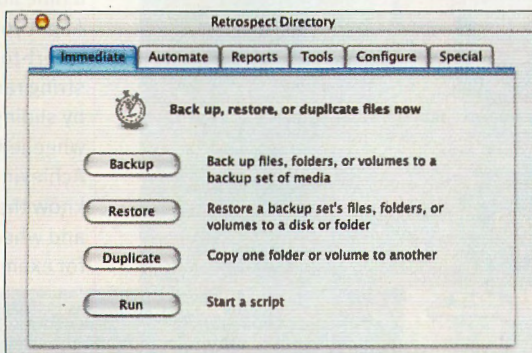
If you run a home business, small business, or make crucial day-to-day changes to files on your Mac, you need a thorough and reliable backup routine. Retrospect is synonymous with *thorough and reliable*—in fact, the app is too complex for casual use.

Retrospect Desktop Backup makes secure, incremental backups to a host of different backup media, including CD-Rs, tape drives, and network volumes. Its options are many—which, unfortunately, can make it a pain in the butt to learn. If you've never used a Retrospect product before, you won't get up and running right away because Retrospect Desktop Backup handles set-up in a way unlike any other backup software we've seen.

Retrospect's backup scheme creates a Backup Set—a collection of tapes, removable media (remember Zip disks?), CD/DVDs, FTP sites, or hard drives—plus a catalog file that keeps track of your backup data and history, which you can save anywhere. Added to this unintuitive separation is an equally unintuitive process of matching folders you want to back up with the media you want to back up to, which requires that you navigate through multiple dialogs. We do, however, like being able to create Retrospect scripts for automated backups, and we appreciated the hefty manual explaining Retrospect's many powers.

Retrospect's standard Snapshot function captures incremental backups so that you can restore your drive to the way it looked on any given day. If

you create Snapshot-based backups, however, you can only retrieve your files by using Retrospect's Restore function—on its own, your Mac's Finder can't read Retrospect's Backup Sets. To create backups that the Finder can read (a bootable backup disk, for example),



Once you crest the learning curve, Retrospect Desktop Backup gives you quick-to-restore, powerful backups.

click the Duplicate button rather than the Backup button, and you'll create a full, Finder-readable copy of your files and system. Note that you can't duplicate to CD-Rs or FTP servers—only hard drives and removable media.

That said, we were able to quickly and easily restore files and folders from CD-Rs, external hard disks, Zip drives, and even our FTP server using the Restore function. You can also encrypt password-protected backups with Retrospect's low-level proprietary SimpleCrypt algorithm, or with beefier (but slower) standard DES encryption.

Retrospect Desktop Backup is great for businesses that make incremental, frequent backups on multiple media. For personal use, though, it's overkill. —Narasu Rebbapragada

**COMPANY:** Dantz Development  
**CONTACT:** 800-225-4880 or  
925-948-9000, [www.dantz.com](http://www.dantz.com)  
**PRICE:** \$129

**REQUIREMENTS:** Power Mac, Mac OS 9.x or 10.1.2 or later,  
64MB RAM for Mac OS 9 or 128MB RAM for OS X (256MB  
recommended), 16MB VRAM

**GOOD NEWS:** Comprehensive backup. Supports multiple media types.  
**BAD NEWS:** Totally unintuitive interface. Too complicated for casual use.

MacAddict RATED  
SOLID



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can't take  
the risk

of someone  
stealing my  
identity and  
ruining my  
credit when  
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# Tony Hawk's Pro Skater 4

SKATEBOARDING GAME



In version 4, you can hitch a ride—or *skitch*—through London, Tony Hawk-style.

clock, and after you reveal a goal, you can return to try it again by pausing the game and selecting View Goals.

Not only are the goals hidden, but also they're more difficult. There are still some relatively easy ones, such as jumping off a ramp and trying to hit a target in the water off the shore of Alcatraz. However, one recurring goal is to hit specific tricks on demand, within a time limit, which can be maddening. And if you never mastered the old revert-to-manual move, which lets you string ramp and street tricks together by sliding (revert) off a landing into a wheelie (manual), it's time to learn it: Achieving some goals requires that you know that move—tricking up to the roof and wheelieing across it on Alcatraz, for example.

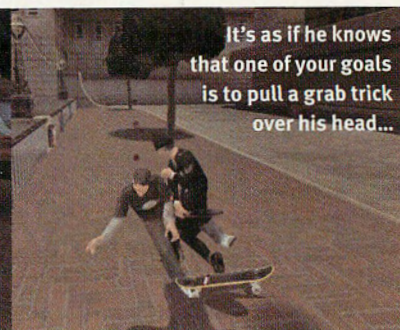
We love it when a good thing gets better, and such is the case with version 4 of Tony Hawk's Pro Skater. By better, we don't just mean more-expansive levels with more vehicle and pedestrian traffic, more hidden areas, more-insane combos, or even slick new tricks. In the case of Pro Skater 4, *better* means more challenging. With changes in the goal advancement system, sloppy skaters who got through the first three Tony Hawk games on fast fingers and perseverance alone will have to step up and hone their skills; to be successful, you now have to know all the tricks plus the moves to string them together.

As in previous versions, your main challenge is your own lack of skill—and if you're dedicated to improving that skill, you know how much time this game can eat up. After you complete all of the goals plus your skater's Pro Challenge (a new, superdifficult goal), you can start fresh, skating the levels again but as a different pro skater, with different specialties and favorite moves. The Pro Challenge is player-specific, as are



some of the level goals along the way.

In previous versions, timed goal objectives were displayed at the start of each level, and the objects (for example, the five letters S, K, A, T, and E, which you must find during your two-minute run) were there every time you play the level until you cleared the goal, so you could stake out the letters' locations while completing other goals. In version 4, the runs aren't timed—you start a level as a free skate, and none of the goal objects are visible. As you skate, you find goals by approaching people who have blue arrows above their heads. Free-skate goal-hunting is annoying at first, but it lets you explore each level without the previous version's 2-minute



The new tricks are a hoot. *Skitching*, or skate-hitching a ride behind a moving vehicle, is a natural addition (though skitching the elephant at the Zoo level was a little *too* natural). The other new trick, Spine Transfer, lets you jump up and out of a half-pipe ramp to either transfer to an adjacent half pipe (the pipes are back to back) or just get out of a pipe easily. Spine Transfer makes it easier to combine high-flying vert tricks with rail grinds.

No matter how mad or sad your skills are, Pro Skater will challenge you—and if you're anything like us, it will lead to obsession, sleep deprivation, unbelievably sore thumbs, and great satisfaction.—Niko Coucouvanis



Tony Hawk's Pro Skater 4 demo



**COMPANY:** Aspyr  
**CONTACT:** 512-708-8100,  
www.aspyr.com  
**PRICE:** \$39.99

**REQUIREMENTS:** 733MHz G4, Mac OS  
10.1.2 or later, 256MB RAM, 700MB disk  
space, ATI Radeon or nVidia GeForce 2 card  
with 32MB VRAM

**GOOD NEWS:** Two awesome new moves.  
Challenging new goals.

**BAD NEWS:** Needs a fast Mac. Achieving some goals  
can be extremely frustrating.

**MacAddict RATED**  
GREAT



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## NEW THIS MONTH



## IK Multimedia AmpliTube Live

Phenomenal. This guitar amp emulator blew us away by putting a Marshall JCM 800, Vox AC-30 Top Booster, and Fender Solid State Combo inside our iBook. As *MacAddict* senior editor and longtime pro guitarist Kris Fong wrote in her review, "Simply put, AmpliTube Live rocks."

## Adobe Acrobat Professional 6

Acrobat has been around forever—well, 10 years—so you'd think Adobe would've run out of ways to improve it. Not so. A host of enhancements led publishing pro John Cruise to write, "Not only can you do more than ever before, you can do everything more efficiently."

## Hemera Photo-Objects

This DVD includes 50,000 quality photos of a mind-boggling array of subjects, each with a perfect alpha-channel mask, for only \$99. *MacAddict* contributing editor and veteran digital artist David Biedny calls Hemera Photo-Objects "one of the all-time greatest graphics bargains."



## SOFTWARE

### AUDIO

IK Multimedia AmpliTube Live	\$129.00	Nov/03, p46	Don't think software can replace monster guitar amps? It can.
MOTU Digital Performer 3	\$795.00	Feb/02, p58	This pro-audio app has a great array of features.
Propellerhead Software Reason 2.5	\$449.00	Sep/03, p55	It's earned its rep as the top software sound studio.

### GAMES

Aspyr Jedi Knight II: Jedi Outcast	\$49.95	Feb/03, p37	Fantastic gameplay with both weapons and The Force.
Aspyr NASCAR Racing 2002 Season	\$39.99	May/03, p57	Realistic NASCAR racing on a Mac? Believe it.
Aspyr The Sims Unleashed	\$29.95	May/03, p58	Pixel-pets abound in the best Sims expansion pack yet.
MacSoft Unreal Tournament 2003	\$49.99	Oct/03, p44	Blood and gore. Violence. More blood, gore, and violence.

### GRAPHICS & LAYOUT

Adobe Acrobat Professional 6	\$699.00	Nov/03, p50	If you're in pro publishing, this is one must-have app.
Adobe InDesign 2.0	\$609.00	May/02, p50	Look out, Quark—Adobe's rival layout tool kicks butt.
Adobe Photoshop 7	\$609.00	Jul/02, p46	Picture-perfect pixel pusher moves to Mac OS X.
Adobe Photoshop Elements 2	\$99.00	Dec/02, p40	This app has most of Photoshop's power for \$500 less.
FontLab 4.5.2	\$549.00	May/03, p53	The font editor all we type geeks have been waiting for.
Hemera Photo-Objects	\$99.00	Nov/03, p56	50,000 quality images for under a hundred bucks.
Macromedia Dreamweaver MX	\$399.00	Sep/02, p44	Our favorite Web-design tool gets a strong upgrade.
Macromedia Flash MX	\$499.00	Jul/02, p51	It started in animation; now it can do anything.
Macromedia FreeHand MX	\$399.00	Jun/03, p49	In the race with Adobe Illustrator, FreeHand pulls ahead.

### PRODUCTIVITY & UTILITIES

Apple Keynote	\$99.00	Apr/03, p48	This presentation app was built for Mac OS X—and it shows.
Bare Bones Software BBEdit 7.0.1	\$179.00	Mar/03, p52	By far the most powerful text editor money can buy.
Microsoft Office v. X	\$499.00	Feb/02, p42	The 800-pound gorilla of productivity applications.
Prolific Publishing Marine Aquarium 2	\$19.95	Aug/03, p54	OK, it's just a screensaver—but it's the coolest one ever.

### VIDEO & ANIMATION

Adobe After Effects 5.5	\$649.00	May/02, p49	This motion-graphics stud improves its 3D powers.
Apple DVD Studio Pro 1.5	\$499.00	Oct/02, p55	Apple's essential DVD-burning app gets even better.
Apple Final Cut Pro 4	\$999.00	Sep/03, p44	This kick-ass video-editor now includes four new apps.

## HARDWARE

### ACCESSORIES

Dr. Bott's extendAIR Direct	\$149.95	May/03, p51	Make AirPort Extreme's range noticeably more extreme.
Formac Studio TVR	\$399.00	Oct/03, p48	Watch TV, record TV, digitize tapes—what's not to like?
Kensington Expert Mouse	\$127.95	Oct/03, p60	Optical trackball plus scroll wheel equals killer controller.
MacWireless Power Over Ethernet	\$29.98	Jun/03, p61	Mount an AirPort Base Station 250 feet from AC power.
Palm Zire 71	\$299.00	Aug/03, p44	A PDA, digital camera, and MP3 player all rolled into one.

### AUDIO

Apple 15GB iPod	\$399.00	Jul/03, p44	The world's greatest MP3 player gets smaller and cooler.
Digidesign Mbox	\$495.00	May/02, p59	This audio interface is a traveling musician's delight.
Griffin Technology iTrip	\$35.00	Aug/03, p52	This iPod FM transmitter uses the entire frequency range.

### DIGITAL CAMERAS

Canon PowerShot S230 Digital Elph	\$399.00	Mar/03, p48	A great 3.2-megapixel camera in a tiny, low-cost package.
Leica D-Lux	\$900.00	Oct/03, p46	Exceptional style married with exceptional image quality.
Nikon Coolpix 3100	\$359.00	May/03, p43	The best point-and-shoot digicam we've seen yet.
Olympus C-4000 Zoom	\$449.00	Jan/03, p52	Great image quality, 4 megapixels, and versatile controls.

### DISPLAYS

Apple Cinema HD Display	\$1,999.00	Aug/02, p40	This 23-inch, 1,920-by-1,200-pixel beauty inspires lust.
Formac gallery 2010 Platinum	\$1,399.00	Jan/03, p47	Bright, fast, huge—and it costs only \$.0007 per pixel.

### PRINTERS

Brother HL-1870N	\$699.99	Aug/02, p45	Need a sturdy laser printer? This one's a workhorse.
Epson Stylus Photo 2200	\$699.00	Oct/02, p42	The most stunning photo printer we've ever tested.

### STORAGE

Apple Xserve RAID	\$10,999.00	Sep/03, p47	Even at over \$10K, this righteous RAID is still a bargain.
LaCie d2 200GB FireWire 800	\$339.00	Jun/03, p47	FireWire 800 speed meets solid-as-a-rock construction.
OWC Mercury Elite Pro	\$319.99	Jul/03, p53	This 180GB FireWire 800 drive outpaces the competition.

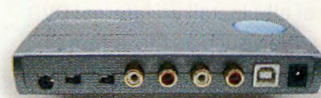


# Heard any good music lately?



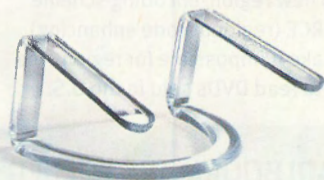
**The PowerWave** USB Audio Interface & Desktop Amplifier is a powerful and extremely flexible computer audio tool. With it you can record any mic or line input into your computer. Record your entire album collection to make CDs or MP3s. Hook-up a mic and musical instrument and turn your computer into a recording studio.

But PowerWave is also an integrated desktop amplifier. Use it to connect any set of home speakers to your computer. PowerWave makes a great compact amp for your MP3 player. It even enables the use of Apple Pro Speakers™ with any USB enabled computer. Flexible input, exceptional output and amplifier power in one beautiful device—PowerWave.



**PowerWave** \$99  
USB Audio Interface & Amplifier

\$39<sup>99</sup>



## iCurve

### PowerBook & iBook Stand

- Raises laptop screen to the perfect height
- Creates room on the desktop for an external keyboard and mouse
- Keeps laptop cool with max air circulation

\$35



## iTrip

### FM Transmitter for iPod

- Play your iPod's music through any empty FM radio station from 87.9 to 107.9
- iPod powered - no battery necessary
- Fits snug to top of iPod - no messy cables

\$45



## PowerMate

### USB MultiMedia Controller Knob

- Now in Brushed Aluminum and Black
- Great control for iTunes or iMovie
- Programmable for any application
- Replaces repetitive keystrokes



# 684 HOW TO

because inquiring minds have the right to be inspired

GOT A QUESTION?  
NEED ADVICE?

## ask us WE CAN HELP

### IBOOK UPGRADE

Are there any third-party upgrades available for my Snow iBook?

The iBook's upgrade opportunities are limited, but you can max out your RAM at 640MB, supersize your hard drive up to 80GB, and—perhaps coolest of all—install an internal DVD and CD writer, such as the Internal DVD-R/RW from MCE Technologies (\$379, [www.mctech.com](http://www.mctech.com); note that this one won't work with iDVD).

### SUPPORTING HOMEMADE HARD DRIVES

I put a 40GB hard drive into an external USB enclosure, but it doesn't work with my iMac running Mac OS 8.6. Why?

Mac OS 8.6 doesn't include the software needed to access your particular USB hard drive. You need to install USB Mass Storage Support 1.3.5 (<http://docs.info.apple.com/article.html?artnum=60394>). Mac OS X already includes drivers for external USB drives.

### PRINTER ON NETWORK

My laser printer is connected to the Internet via my home network—can strangers access the printer?

No. The reason has to do with your Mac's IP (Internet Protocol) address. Every computer on the Internet has an IP address. There are two kinds of IP addresses: public and private. Public IP addresses (such as the one assigned to your Mac by your Internet Service Provider) are available directly to other computers on the Internet. Private IP addresses, which allow computers on private networks to use the Internet, are not directly visible to the Internet. If your home network uses a router for Internet access, then your computers and printers have private IP addresses and are invisible to the Internet.

### NETWORKING 101

What is the difference between a hub and a router?

A hub connects devices on the same network, while a router connects two networks together. For example, an Ethernet or AirPort hub (i.e., a Base Station) connects Macs on your home network. A router, on the other hand, connects your home network to your ISP's network, and therefore to the Internet. Some devices (like the AirPort Base Station) are both routers and hubs.



The simple Ethernet hub can turn a few Macs into a home network.

### COOL MACWARE

Where can I buy Mac-inspired clothing so I can advertise my superiority over all my PC-using friends at school?

Ah, the tyranny of fashion. Check out The Missing Bite (<http://missingbite.com>) for Apple-logo apparel, watches, mugs, and other merchandise. Another source is RedLightRunner ([www.redlightrunner.com](http://www.redlightrunner.com)), which carries stickers, posters, hats, and other Apple-logo tchotchkes.



How 'bout these Apples?

### DVD REGION CHANGES

I have run out of region changes on my computer's DVD drive, how can I reset my drive?

You can't. Once you use up your five region switches, the drive becomes locked on a certain region. Firmware patches allow some drives to be region-free (check out <http://wormintheapple.gr/macdvd>), but using them voids your warranty and may muck up your drive. Also, a new region-encoding scheme called RCE (regional code enhancing) may make it impossible for region-free drives to read DVDs sold in the U.S.

## quick answers TO QUICK QUESTIONS

### SUPERPAINT LIVES ON

How do I open Aldus SuperPaint



documents in Mac OS X?

You can run Aldus SuperPaint in

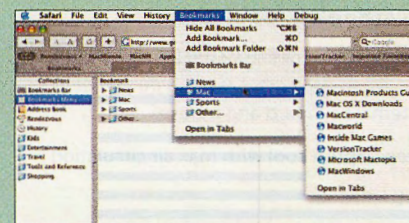
Classic mode in Mac OS X or use Lemke Software's GraphicConverter (\$35, [www.lemkesoft.de](http://www.lemkesoft.de)) to open SuperPaint files.



Open SuperPaint files in Mac OS X.

### SAFARI BOOKMARK FOLDERS

How can I get my Safari bookmark folders to show up in the Bookmarks menu?



Organize your Bookmarks menu in Safari.





No whining—  
anyone  
can do this!



It'll take some  
effort, but you  
can do it.



This stuff's  
for the pros.

## UNIX UNIVERSITY



### FIND FILES FAST

**How can I use Unix to find files?**

Use the find command in the Terminal (Applications > Utilities). It's not the most intuitive command, but it has lots of in-depth options. Here's how to get started.

#### FIND FILES BY NAME

Type the following command to find files named document.doc in the current directory:

```
find. -name document.doc -type f
```

The period (.) tells find to search the current directory, and -name,

followed by a space and the name of the file specify what file to search for. -type f restricts the search to files, not folders.

#### OTHER FIND COMMANDS

**find. -name '\*current\*' -type f** searches only for files that contain the letters current.

**find. -mtime -1** searches for files modified within the last 24 hours.

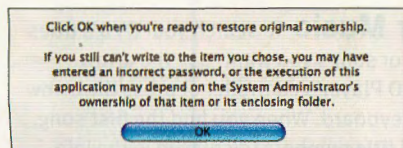
**find. -mtime -2** searches for files modified within the last 48 hours.

### TEMPORARY ACCESS

**In Mac OS X, how can I temporarily access files in another user's directory?**

If you have administrator access and need temporary access to another user's files, use Laine Lee's free utility Uptowner (<http://lonestar.utsa.edu/llee>), which will temporarily give you ownership of a file or folder so that you can have read-write access. When

you're finished, click OK to restore access privileges to its original owner.



**Uptowner changes file or folder ownership.**

Select Show All Bookmarks from the Bookmarks menu, then highlight and drag your folders from the Collections window on the left into the main Bookmark window on the right.

### BLOWN ETHERNET

**Lightening blew out the Ethernet port on my iMac. What are my options?**

You don't have many. The iMac's Ethernet is integrated into the logic board, so replacing that board is the only fix. Because that fix might run you

### STEREOGRAM X

**Is there an application for Mac OS X that creates those cool Magic Eye stereograms?**

Magic Eye-style stereograms are those tiled, colored pictures that reveal a hidden 3D image when you cross your eyes. To make your own, use Laine Lee's Absird 1.1 (free, <http://lonestar.utsa.edu/llee/applescript/absird.html>)—all you need is a black-and-white JPEG to use as the hidden 3D image and another small JPEG to tile.



Seven years of handling tech support for Apple, Power Computing, and a Texas school district have given Buz Zoller Mac superpowers.

upwards of \$750 on an 800MHz iMac G4, we'd suggest switching to AirPort. In the future, invest in a data-line surge protector, such as the APC ProtectNet PNET1 (\$39.95, [www.apc.com](http://www.apc.com)).



**A surge protector can save your Mac when lightning strikes.**

## ThisMonth



### 70 Rip Sound Tracks from Your DVDs

You needn't be chained to your sofa just to hear the music on your DVDs. Transfer the soundtrack to a CD or iPod, and you can take your tunes to go.



### 72 Turn Day into Night

If you're looking for a dramatic way to change the look of your photos, we show you how to turn bright daylight into a starry, starry night.



### 74 Clear a Foggy Day

Who says you shouldn't fool with Mother Nature? If gloomy fog and haze prevail in your snapshots, here's how to turn your gray skies blue.

**Submit** technical questions or helpful tips directly via email ([askus@macaddict.com](mailto:askus@macaddict.com)) or c/o MacAddict, 150 North Hill Dr., Brisbane, CA 94005.



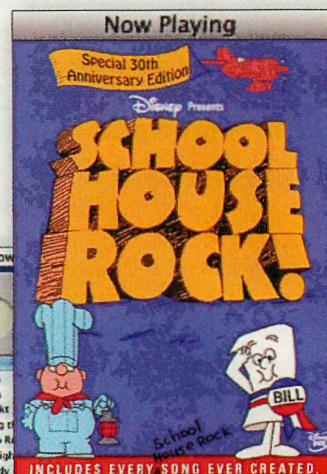
# Rip Sound Tracks from Your DVDs

by Geoff Coffey



## WHAT YOU NEED

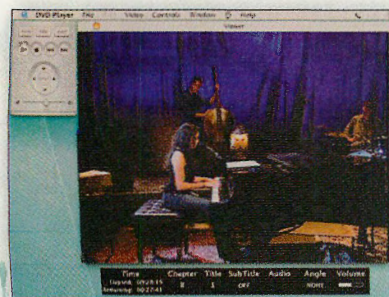
- Mac with DVD-ROM or SuperDrive and Apple DVD Player
- Mac OS 10.2 or later (\$129, [www.apple.com](http://www.apple.com))
- iTunes 3 or later (free, [www.apple.com](http://www.apple.com))
- OSEx 0.0110a1 or later (free, [www.cs.buffalo.edu/~afaversa](http://www.cs.buffalo.edu/~afaversa))
- mAC3dec 1.6 or later (free, <http://sourceforge.net/projects/mac3dec>)
- DVD with music



Why confine yourself to the couch when you can take tunes from your DVDs out and about on an iPod or a CD player?

**N**orah Jones: *Live in New Orleans*, *KISS: Live in Las Vegas*, *Schoolhouse Rock*—we've invested a good chunk of change building up our DVD collection, but must we remain trapped in our abode every time we just want to listen to the music? Heck no. Even though there's not yet a DVD player the size of an iPod, there's still a way to take your DVD tunes on the road. Rip that music right off the disc and put it where Mother Nature intended it to go: iTunes, on a CD, or even on your iPod. The process isn't as easy as ripping CDs, but it's better than shelling out extra to buy a soundtrack CD—if one even exists for your DVD in question. Just remember: Copyright law protects the music on a DVD, so you can only copy music from discs you own.

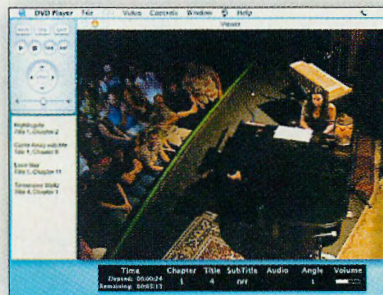
**1 Set Up DVD Player** Finding individual tracks on a CD is easy, but they're trickier to find on DVDs because DVD content is organized into titles and chapters. Unless you intend to rip all 14 hours of that Phish concert DVD, you need to find out where each song is stored. Put your DVD into your Mac and launch Apple's DVD Player. From the Video menu, choose either Normal Size or Half Size, depending on how you want it to appear onscreen. Next, select Preferences from the DVD Player menu. In the resulting window, click the Windows tab, select Wide from the Info Window Type pop-up menu, and click OK. Then select Show



Info from the Window menu to display your DVD's title and chapter information in a separate info box.

**Make sure DVD Player displays its info window, or ripping your favorite songs will become a guessing game.**

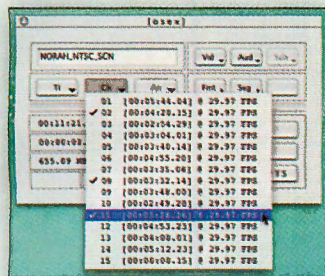
**2 Find Your Music** To search your DVD's titles and chapters for songs you want, use the arrow buttons on DVD Player's controller or press the arrow keys on your keyboard. When you find the first song, jot down its chapter and title numbers (displayed in the info box), and repeat for all other tracks. Be aware that each DVD has its own track structure—most concert DVDs house the entire music soundtrack under one title with songs stored in separate chapters. Some DVDs categorize content across multiple titles and place songs as separate chapters under each title. Others have a title for each song, with some songs spilling over into more than one chapter. Your job is to figure out which titles and chapters contain the songs you want to rip.



**Every Mac addict knows pen and paper are old school—we used Stickies to keep track of titles and chapters.**



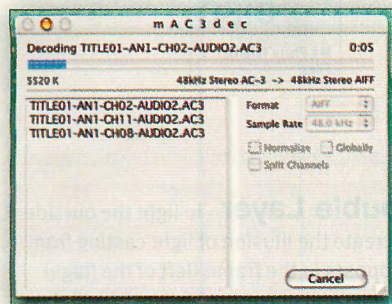
**3 Make Some Choices** Once you've found everything, fire up OSEx, a freeware app that rips DVDs. OSEx can rip only one title at a time, but you can pick as many chapters as you want within it to rip. From the Ti (titles) drop-down, select the title number of your first song from the list (this places a check mark next to it).



Then select one or more chapters from the Ch (chapter) drop-down. Click a chapter number to select it; click it again to deselect.

**To select individual songs (chapters), place a check mark next to the song by clicking it.**

**5 Create the Conversion** When OSEx is done, you'll have one or more strangely named AC3 files, which you need to convert into something your Mac can play. To give yourself the choice of burning audio files to CDs or making MP3s, launch mAC3dec, select AIFF from the Format pop-up, and select 48.0 kHz from the Sample Rate pop-up. Then drag all your AC3 files into the mAC3dec window and click Start. The app converts each AC3 file into an AIFF and saves it in the same folder that houses your originals.



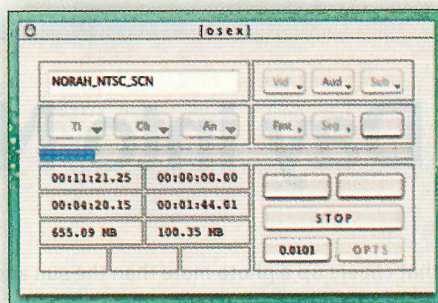
**mAC3dec converts AC3 files into formats your Mac understands—we chose AIFF to give ourselves the option to burn a CD or make MP3s.**

## HEY, WHAT ABOUT ME?

Don't have a DVD drive in your Mac? You're not completely out of luck. Just hook up your set-top DVD player to your Mac and record the audio directly. If your Mac doesn't have an audio-in jack, you need a USB audio input device like the Griffin iMiC (\$39.99, [www.griffintechology.com](http://www.griffintechology.com)). You also need recording software, such as Black Cat Systems Audiocorder (shareware, [www.blackcatsystems.com](http://www.blackcatsystems.com)).

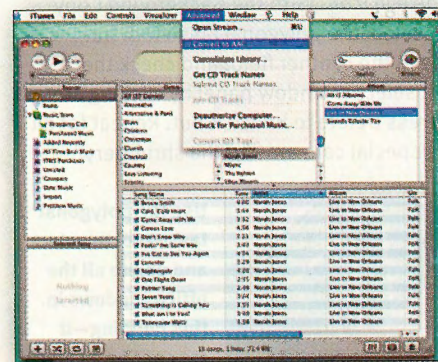
Just connect your DVD player's audio outputs to your Mac input via a stereo RCA-to-1/8-inch stereo miniplug cable, and leave the video connected to the TV. Use your DVD remote control to navigate to the song you want, click your software's record button just before the music starts, let the song play, and click stop just after it ends. This simple approach may seem tempting to those who have DVD-ROM drives, but don't be swayed—we found that the quality of music was much better when we ripped it on our Mac.

**4 Rip It** OSEx can rip both audio and video, but since we just want audio, click the Vid (video streams) drop-down menu and deselect all items. If the Sub (subtitles streams) drop-down isn't grayed out, deselect all of its options as well. Many music DVDs feature multiple formats for an audio track (AC3 stereo, DTS surround, and so on). Click the Aud (audio streams) drop-down and choose one in stereo format (one that displays "2Ch" in its name) or whatever's available. Then click the Fmt (output format) drop-down and select Elem. Streams (this saves tracks as AC3 audio files). If you're ripping multiple songs at once, where each song is one chapter, click the Seg (output segmentation) drop-down, and select Chapter. If you're ripping a song that spans across more than one chapter, select Title instead. Then click Begin. In the resulting dialog, select where to save new files, and click Choose to let 'er rip. Now's a good time to grab a cup of coffee.



**OSEx keeps you posted with a progress bar. Disregard those MB file progress numbers—they factor in video size, which you're not saving.**

**6 Put Things Away** Once you've got your AIFFs, give your tracks more appropriate names (if you wish). If you want to create a CD, use your preferred disc-burning app and go to town. If you want MP3s, launch iTunes, press and hold down the Option key, and select Convert To MP3 from the Advanced menu (or Convert to AAC if you're using iTunes 4 or later, and have chosen AAC as your preferred importing encoder in Preferences). In the resulting dialog, navigate to your AIFF files, hold down the Command key, select all AIFF files, and click Choose to convert and import your music into the iTunes Library.



**iTunes' Advanced menu allows you to convert songs and add them to the library in one fell swoop.**

Geoff Coffey believes in his heart that iTunes is the single most significant technological advancement of the modern era. He likes movies too. And *Schoolhouse Rock!*





Want to totally change the look of a photo?  
Turn day into night with a little help from Photoshop.

# Turn Day into Night

by Kris Fong



## WHAT YOU NEED

- Adobe Photoshop (\$609, [www.adobe.com](http://www.adobe.com)) or comparable image editor
- Daytime.tif (on the Disc)



There's nothing that cheers up a photo more than the sun and a bright blue sky. However, if you enjoy the darker, dramatic side of life, you can turn day into night via an image editor. There are many ways to accomplish this, depending on your photo and how much time you're willing to spend fine-tuning the effect. Here's how we turned off the big light in our sky.

**1 Knock Out Windows** The first step in making this building look like it's lit from the inside is to knock out its windows. Open Daytime.tif (on the Disc) in Photoshop. In the Layers palette, drag the Background layer down onto the new layer icon (the dog-eared page) to make a copy. Highlight the percentage in the image window's bottom left corner, type *100*, and press Return to view the photo at 100 percent. Next, turn off the original Background layer's visibility by clicking the eye icon. With the Background Copy layer still highlighted, select the polygonal lasso tool from the tool palette, type *1* in the Feather field, and check the Anti-aliased box. Then select a window panel by clicking around its four corners, and press Delete to knock it out. Repeat for all other windows, taking special care around the shrubbery.



Use the polygonal lasso tool to select and delete all the office windows in this building—it may not be as much fun as throwing rocks through them, but it's far more constructive.

**2 Make a Double Layer** To light the outside of the building, create the illusion of light casting from the exterior lampposts in the frame (left of the flags) to light the walkway, and one out-of-frame floodlight to light the building where the reflection hits. To do this, each illuminated area needs to reside in its own layer. From the View menu, select Fit On Screen to see the entire photo. Then select the rectangular marquee tool, type *0* (zero) in the Feather field, and drag a marquee from the front corner of the building's overhang across the entire right side of the photo. Then copy the selection (Command-C) and paste it in a new layer (Command-V).



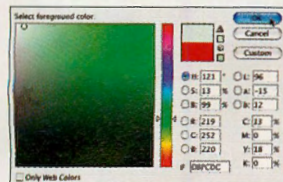
Before you can create the two light sources, put the two areas the light sources will affect in separate layers via copy and paste.

TOP-LEFT PHOTOGRAPH BY KRIS FONG

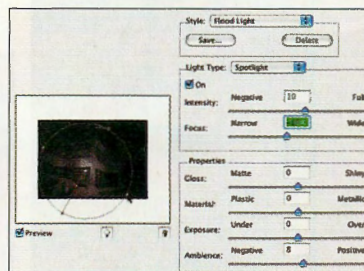


**3 Light the Inside** To complete the light-through-the-windows look, select New, and then Layer from the Layers menu; in the resulting dialog, type *Interior Light* in the Name field, select Exclusion from the Mode pop-up menu, type 85 in the Opacity field, and click OK to make a new layer. Drag this layer between the Background and Background Copy layers in the Layers palette. Turn visibility back on in the Background layer. Click the foreground color swatch in the tool palette, select a very light green color from the Color Picker, and click OK.

To mimic fluorescent lighting, select a very light green in the Color Picker for the Interior Light layer. Then select the paint bucket tool and with the Interior Light layer highlighted, click anywhere in the image.



**4 Illuminate the Outside** Select the Background Copy layer and from the Filter menu, select Render, then Lighting Effects. In the resulting dialog, select Flood Light from the Style pop-up. From the Light Type pop-up, select Spotlight, and check the On box. Set Intensity to 10, Focus



The tricky part: Fuss with the Preview's outer circle points and the Focus slider until you get the lighting just right.

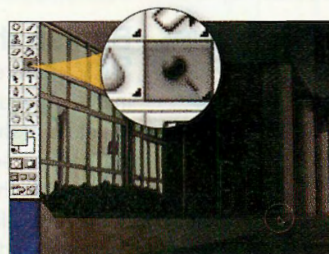
to around 3, and all sliders under Properties to 0 (zero), except for Ambience—set this to 8. In the preview window, move the center point to where the reflection shines on the building. Then rotate the outer circle point (connected to the center point) to the bottom, left of center. Drag the other points and adjust the Focus slider to fine-tune the effect. Then click OK.

**5 Light the Walkway** Select Layer 1 in the Layers palette, and select Lighting Effects again. Start with the same lighting settings as in step 4, and then drag the center point onto the lamppost closest to the flag in the preview window. Move the connected outer circle point to the bottom of the image, and then adjust the other circle points and the Focus slider to throw a narrow light across the walkway and in front of the building—be careful not to illuminate the sky. Click OK. If there's too much of a discrepancy between the two rendered light layers, undo the action and try again. Don't worry if there's a small visible seam between the two—we'll deal with this next.



When adjusting the circle points, be careful not to illuminate the sky, or your Photoshop trickery will be obvious.

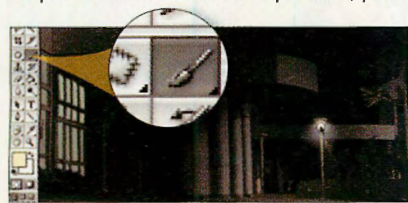
**6 Blend the Seam** To blend the black seam between the two light layers, first decide which layer is darkest at the seam's edge and select it in the Layers palette. If it's Layer 1, select the eraser tool; select a soft, round, size-65 brush from the Brush drop-down menu; and set the



Because our Background Copy layer's edge was darker than Layer 1, we used the dodge tool to lighten the Copy layer's shadows to blend with its neighbor layer.

Opacity to 10 percent. Next, make short, zigzagging strokes across the seam until the area blends with the Background Copy layer. If the Background Copy layer is darker, select the dodge tool, then a soft, round, size-65 brush from the Brush drop-down, and select Midtones from the Range pop-up. Next, set Exposure to 5 percent, and carefully make short strokes across the dark areas to lighten them until they blend with the neighboring edge.

**7 Light the Lampposts** To create the glow from the lampposts, first create a new layer: From the Layer menu, select New, then Layer. In the resulting dialog, click OK. Select the foreground color swatch, choose a whitish yellow color from the Color Picker, and click OK. Then select the brush tool and from the brush icon drop-down in the Options bar, select Airbrush Soft Round 50% Flow. Select a soft, round, size-45 brush, and set flow to 25 percent. Zoom in to 100 percent, place the cursor on the lamppost closest to the flags just below its top, and click to draw a large, round halo. Next, select a size-21 brush and redraw a smaller, more opaque globe towards the top of the halo. Repeat with the other post, but use a size-35 brush for your first pass, then switch to size 17.



To create the lamppost illumination using the airbrush, place the cursor where you want to put the color and then click.

**8 Fill the Sky with Stars** Using the same airbrush tool, select any brush size between 5 (tiny) and 15 (big), and click anywhere in the sky to place a star. Vary the brush size for the most realism. Don't cram in too many stars, or your sky will end up looking more polka-dotted than star-studded. When finished, zoom out so that you can see the entire image, and check to see if anything needs tweaking. If all looks good, select Flatten Image from the Layer menu, and save your work. *Bonne nuit!*

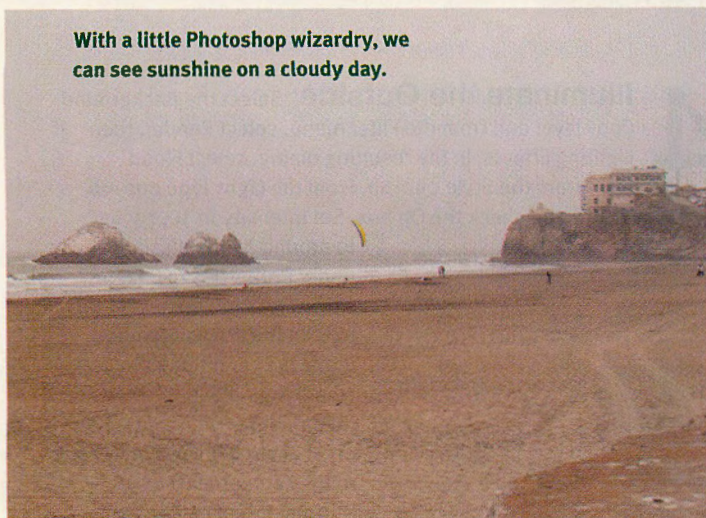


Using the airbrush tool, click once to create a small star or click and move the brush in a small circle to make it a little bigger and more opaque.

Kris Fong has no clue why "morning people" exist.



With a little Photoshop wizardry, we can see sunshine on a cloudy day.



# Clear a Foggy Day

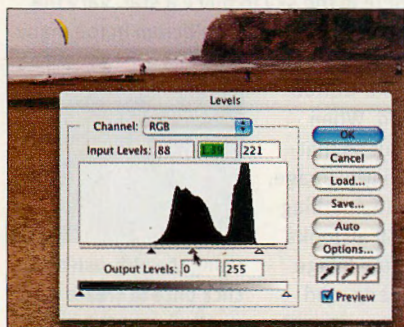
by Kris Fong



## WHAT YOU NEED

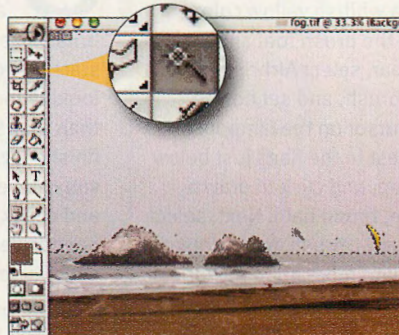
- Photoshop or comparable image editor
- Fog.tif (on the Disc)

**1 Reset the Exposure Levels** Open Fog.tif (on the Disc) in Photoshop. In the Layers palette, drag the Background layer onto the new layer icon to make a copy. From the Image menu, select Adjustments, then Levels. In the Levels dialog, check the Preview box and drag the black levels slider (the black triangle below the “mountain range” graphic) to where the left side of the histogram (the “mountain range”) begins. Then drag the white levels slider (the white triangle) so that it sits directly below the right side of the histogram. Then move the gray levels slider (gray triangle) to the left until the exposure levels look bright with good contrast.



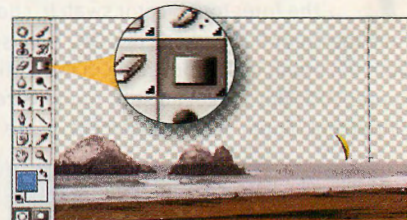
Fog tends to produce low-contrast images—cut through the haze by tweaking image levels.

**2 Banish the Gray Sky** Before you can bring in a bright blue sky, you’ve got to get rid of the old one first. From the tool palette, select the magic wand tool, type 10 in the Tolerance field, check the Anti-aliased box, hold down the Shift key, and click in the sky area multiple times until the entire sky is selected. Be careful not to select the water—if you accidentally do so, press Command-Z to undo the last selection, and then hold down Shift and carry on with your clicking. Once you’ve got everything, press Delete to get rid of the sky. Turn off visibility in the original Background layer (click the eye icon) to view your riddance.



To turn a gray sky blue, get rid of the original by selecting it with the magic wand tool.

**3 Hello Blue Sky** From the Layer menu, select New, then Layer. In the resulting dialog, click OK to create a new layer. Drag the new layer between the Background and Background Copy layers. Click the foreground color swatch, choose a sky-blue color from the Color Picker, and click OK. Click the background color swatch, choose white from the Color Picker, and click OK. Then create the sky by selecting the gradient tool and drawing a line from the top center of the photo straight down to the water’s edge. Use the eraser to get rid of any extra artifacts from the old sky. Then fine-tune the scene using the Levels again, flatten the layers, and save.



To create the new sky, use the gradient tool to simulate a realistic blue sky with white horizon haziness.

Living in the San Francisco area, MacAddict senior editor Kris Fong has had far too many of her photos foiled by fog.



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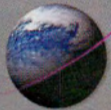
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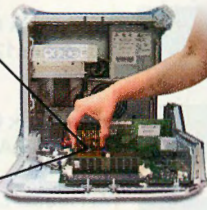
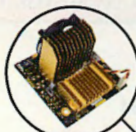
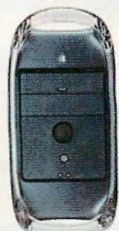
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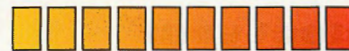
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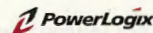
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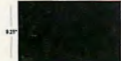
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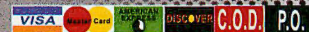




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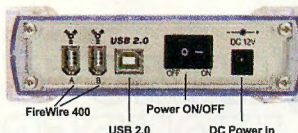
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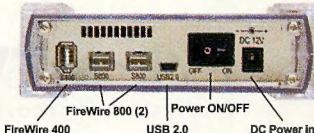
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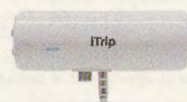
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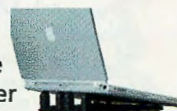
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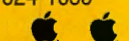
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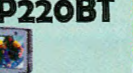
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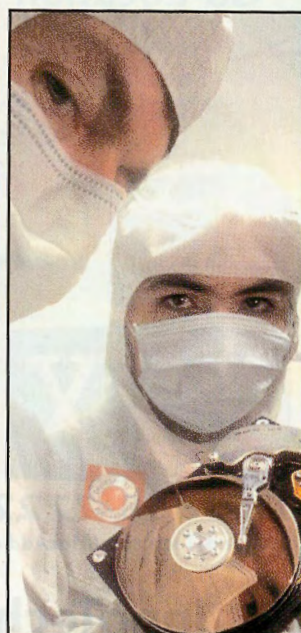
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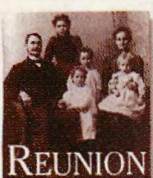
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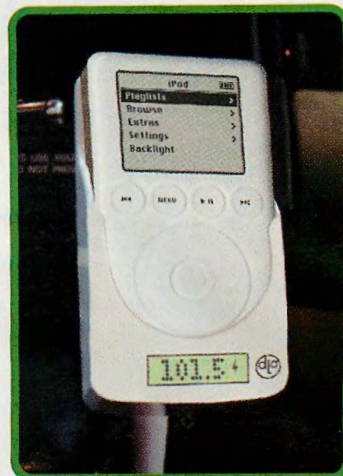


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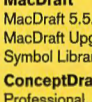
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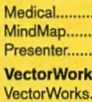
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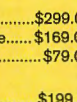
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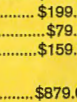
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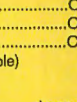
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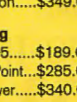
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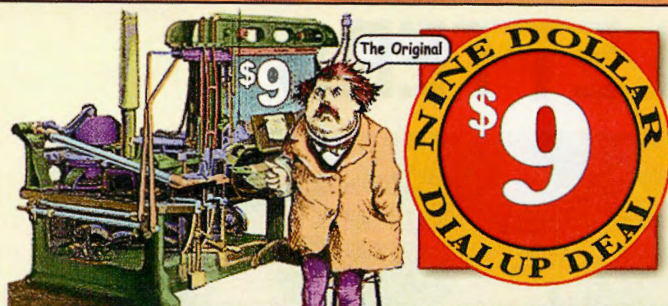
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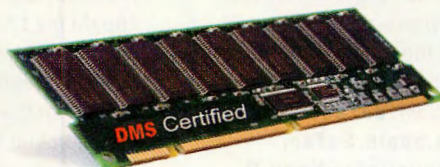
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# LETTERS



## RECENTLY SIGHTED

The wife of one of my clients made this table for my office.  
—Mark Penney

## POLL TANTRUM

I am a 14-year-old old Mac junkie, and I'm pissed off because I got the September 2003 issue of *MacAddict* on August 28—18 days after the close of the reader poll voting (*Log Out*, p94). Such slowness, if repeated, will incur my wrath.—*Ian Strom*  
**Keep your wrath to yourself.** We've now moved our poll online. Each month, check [www.macaddict.com](http://www.macaddict.com) for a new poll, vote online, then look in an upcoming issue to read the results.  
—Max

## THE LIST

by *MacAddict Reader Steve*  
(not Jobs)

PC	MAC
Leno	O'Brien
Bush	Clinton
Thanksgiving	Halloween
Oldsmobile	Volkswagen
Football	Soccer
Clay	Ruben
Hamburger	Reuben
Baked Potato	Couscous
Budweiser	Sam Adams
King George	Sam Adams
Cats	Dogs
Cats	Hairspray

## YOU DO?

I love the Office Assistant, I think it's cute.  
—Brian Heibert

## SOMETHING'S FISHY

As I settled down in my armchair with the September *MacAddict*, I let out a contented sigh: Ah, the G5. I flicked the magazine open as gently as my trembling hands would allow and skipped ahead to the cover story—then I jerked back from the page. The odor was unmistakable: fish! The pages of the September issue smell like fish!—*Douglas Ansel*  
**You might ask what your mailman does in his evening hours. We use nonorganic, nonfragrant ink.**—Max

## DEBUG BE GONE

Very good tip on how to turn on Safari's Debug menu (*Letters*, Sep/03, p94), which lets Safari emulate other Web browsers. I was able to order online via a site that recognized only the PC version of Internet Explorer. Now my question is, how do you turn off the Debug menu?—*Bob Heffner*  
**To turn on the Debug menu, set IncludeDebugMenu to 1. To turn it off, set it back to 0 (zero). Quit Safari and type the following in the Terminal (Applications > Utilities): defaults write com.apple.Safari IncludeDebugMenu 0**

When you relaunch Safari, the Debug menu will be gone.—*Max*

## GLOSSY PROBLEMS

I would like to vote for the older, matte finish on the *MacAddict* cover instead of the new New York-style high-fashion gloss. These slick magazines seem to think for themselves and travel all over the bathroom floor. Thanks for the best innards, though!—*Bill*

## MEOW

Our cat Grady Wilson loves the iBook.—*Johnny Brewton*



**OK, I admit it. I love Frosted Flakes.**

## YE OLDE G4

Your September issue was chock-full of great G5 information ("Welcome to the Future," p20), which I much appreciated. What I didn't appreciate was your attempt to make us G4 owners feel like we own yesterday's leftovers. I bought my 17-inch, 1GHz iMac G4 in May 2003 and have zero regrets. I'm thrilled for the future of Apple, but let's not write off the G4s just yet. I plan

# SURVEY SAYS

## Online Poll Results

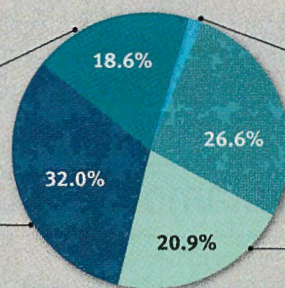
Results of our August 2003 online poll. Check [www.macaddict.com](http://www.macaddict.com) each month for a new online poll.

## ARE YOU PLANNING TO BUY A POWER MAC G5?

Screw desktops. I'm waiting until Apple announces new PowerBooks.

Maybe—I'll see how the first release goes and then decide.

1,658 respondents



1.7%  
I'm too broke to even think about it.

Yes, right away!

No, my current Mac works fine.



on having mine for a long time.—*Scott C. O'Rourke*  
Except for *Reviews* editor Niko Coucouvanis—who ran out to the Apple Store and purchased a G5 the first day he could—we all use Power Mac G4s at the office, and we love 'em too.—*Max*

## THAT'S LRF TO YOU

I noticed in your review of the I-Trigue i3350 (*Reviews*, Sep/03, p56) that you referred to the small rubber objects on the base of printers, scanners, and so on as "grippy footies." Although that's creative, I don't think it's the official term. I use LRF, the acronym for Little Rubber Feet.—*Silvan Linn*

## WORMS BLAST

My PC-using colleagues run around complaining because their computers have a virus or a worm or something. They keep crying to me, "What should I do?" I know what to do because I've done it already: Get a Mac, damn it.—*Louise Cote*

## JAGUAR OR JAGUAR?

Should I get Mac OS 10.2 Jaguar or the silver Jaguar S-Type?—*Manish M. Patel*  
If you've got the \$43,000 required to buy a new Jaguar S-Type, buy it, then charge your friends \$20 a pop for a ride. Seven friends later, you'll have the bucks for Mac OS X Jaguar (or even Panther).—*Max*

## TERMINAL YOUTH

w00t! w00t! I scored a 56 on the "Ultimate MacAddict Geek Quiz" (Sep/03, p32). I'm 13 years old!—*Shea :D*  
Shea :D's near-perfect score merits Terminal Geek status—the key to popularity in Jr. High. w00t! w00t!—*Max*

## COUNTRY ROADS

The elegant grated enclosure on the front of the new Power Mac G5 poses a possible problem for those of us who live out in the country on dusty dirt roads. Will a lot of dust get in through all those holes?—*John Davis*

It's a legitimate question—although a bit of dust won't cause much of a problem. Our testing suggests that the fans move at a speed fast enough to pass dust through the enclosure but slow enough to avoid sucking it in. That said, our environment is more of an asphalt jungle than a country bungalow.—*Max*

## MACADDICT MAKEOVER

I love the new look of your Web site. It's so much better than the green design.—*Drew Page*



From green...



...to clean.

## HOW MANY QUESTIONS DOES IT TAKE?

Is Rik Polish? Does he like pierogi? Is it true that the last Mac computer will come out in 2006?—*JW*  
Tak, tak, and nie (that's yes, yes, and no).—*Max*

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Contest results will appear in our April/04 issue.

### Contest Rules

The judges will be MacAddict editors and will base their decision on 33 percent humor, 33 percent originality, and 33 percent creativity. All entries must be received no later than December 31, 2003, with the winner announced around April 2004. By entering this contest, you agree that Future Network USA may use your name, likeness, and Web site for promotional purposes without further payment. All prizes will be awarded and no minimum number of entries is required. Prizes won by minors will be awarded to their parents or legal guardians. Future Network USA is not responsible for damages or expenses the winners might incur as a result of this contest or the receipt of a prize, and winners are responsible for income taxes based on the value of the prize received. A list of winners may also be obtained by sending a stamped, self-addressed envelope to Future Network USA c/o MacAddict Contest, 150 North Hill Dr., Brisbane, CA 94005. This contest is limited to residents of the United States. No purchase necessary. Void in Arizona, Maryland, Vermont, Puerto Rico, and where prohibited by law.

MacAddict CONTEST

## WINNER!

Congratulations to **Sonny Klamers**, whose caption for this picture won him a 23-inch Sony Premiere Pro flat-panel LCD display (\$2,599.99, [www.displaysbysony.com](http://www.displaysbysony.com)).

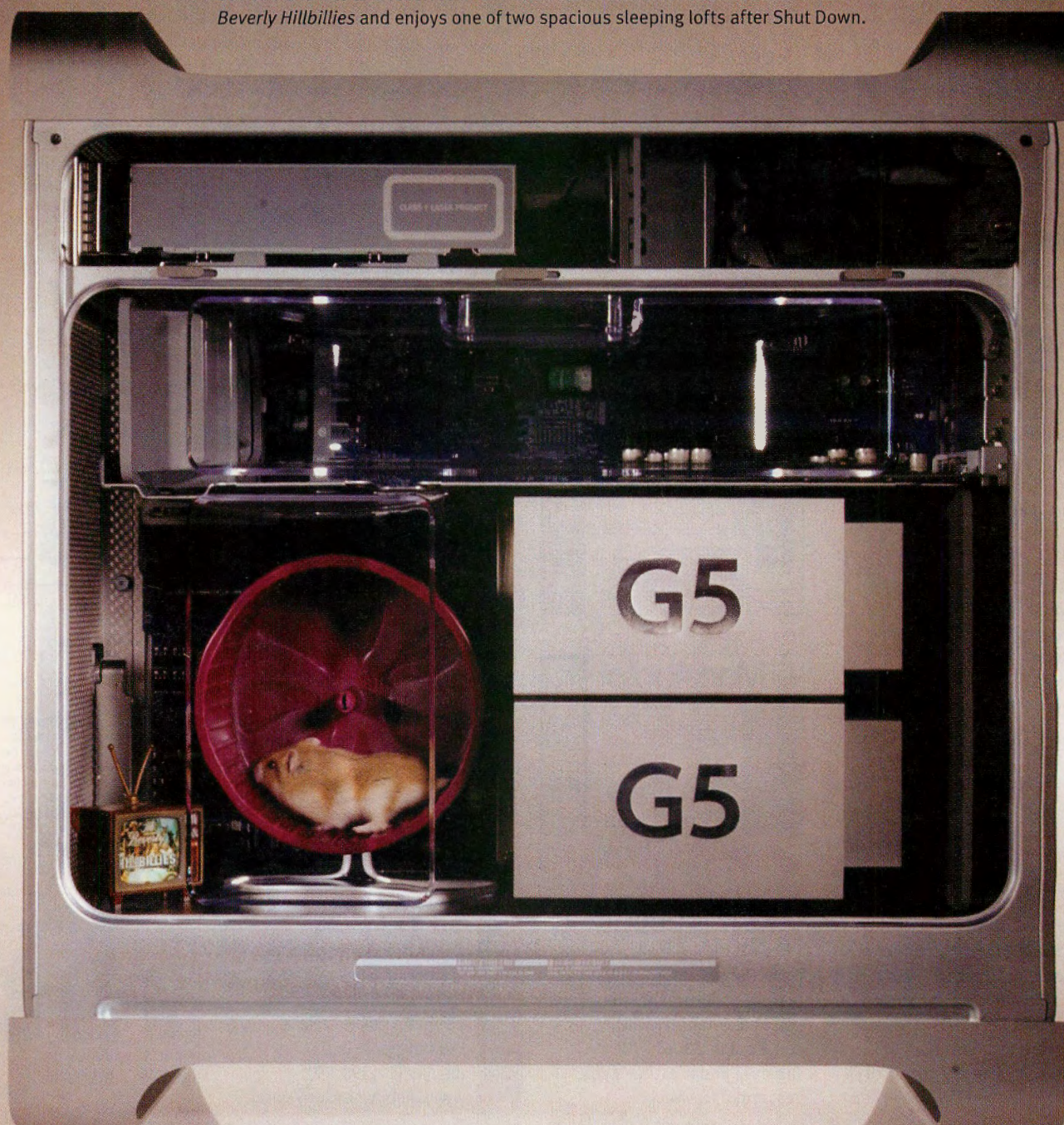


A chick, a chimp, and three chumps.



# THE SECRET BEHIND THE G5's EXTRAORDINARY POWER

Highly specialized Siberian überhamsters like this one, code-named Sasha, train freestyle for weeks in a Run-about Ball before optimizing their performance on an exercise wheel custom-made for the G5. At full stride, Sasha produces an astonishing 1HHz (hamsterhertz), which not only obviates the need for traditional silicon processors, but also generates enough airflow to keep the tower within a few degrees of its ideal operating temperature. Sasha transmits and receives information via television between reruns of *The Beverly Hillbillies* and enjoys one of two spacious sleeping lofts after Shut Down.



PHOTOGRAPH BY MARK MADEO



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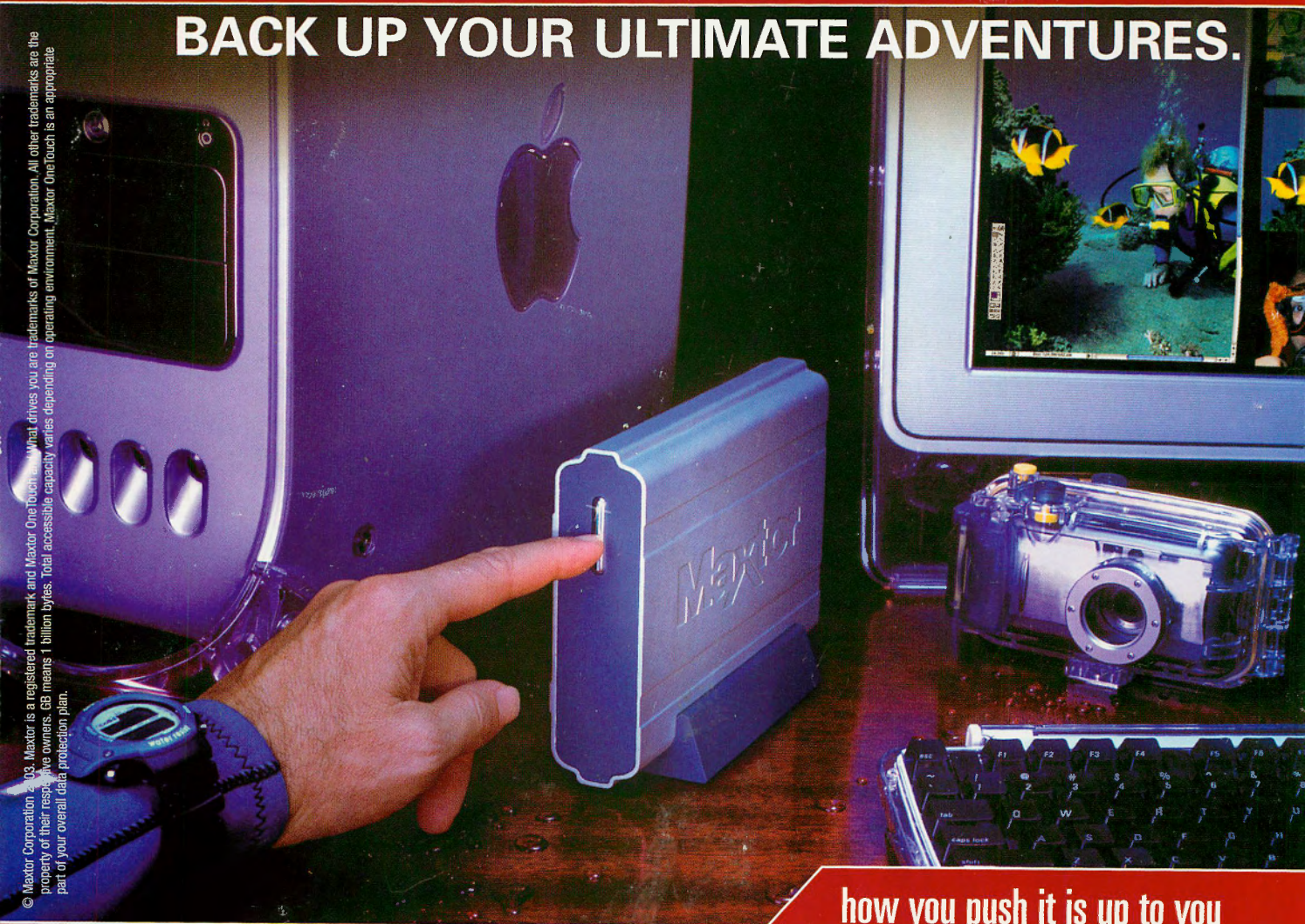
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